File Copy Attack Paper #7

					ATTY. DOCKET NO. 0942.4640001		APPLICA 09/438	TION NO. ,358		
		FORM PT	0-1449		APPLICANT					
INF	ORMATIO	ON DISCL	OSURE STATE	ME <u>NT</u>	Gerard et al.		GROUP			
					November 12, 1999	FIEING DATE				
				U.S.	PATENT DOCUMENTS					
EXAMINER				2475	NAME	CLASS		SUB-CLASS	FILING DATE	<u> </u>
INITIAL			ENT NUMBER	DATE	Backman, K.C.	435		68 69.1	04/30/1984	
ARY	AA1	4,673		06/16/1987	Backman et al.	435		108	02/13/1985	
-1-	AB1	4,743		05/10/1998		435		172.3462	04/29/1987	
E JC	AC1	4,959		09/25/1990	Sauer B.L.	435		6	10/01/1990	
18/2		5,227	,288	07/13/1993	Blattner, F.R.	435		91.1	10/15/1993	
- AND	AB	5,354	,668	10/11/1994	Auerbach, J.I.	435		172.3 475	03/15/1994	
0 6	A	5,434	,066	07/18/1995	Bebee, R.L., et al.				12/21/1993	
/ \$\frac{1}{2}		5,470	,727	11/28/1995	Mascarenhas et al.	435		172.3		
PATENT & C	AH1	5,591	,609	01/07/1997	Auerbach, J.I.	435	<u> </u>	91.2	02/03/1995	
THE STATE OF THE S	AI1	5,614		03/25/1997	Auerbach, J.I.	435	<u> </u>	91.2	09/26/1995	
	AJ1	5,635		06/03/1997	Hooykaas et al.	435	<u> </u>	172.3	01/20/1995	
	AK1	5,658		08/19/1997	Odell et al.	435	<u> </u>	172.3 288	07/27/1994	
AND	AKI	13,030	,,,,,,,		GN PATENT DOCUMENTS					
EXAMINER				1	COUNTRY	CL	ASS	SUB-CLASS	TRANSLATIO	N
INITIAL		DOCUM	IENT NUMBER	DATE	COUNTRY					Yes
HHZ	AL1	EP 0	160 571 A2	11/06/1985	Europe	1				No Yes
AAS	AM1	EP 0	EP 0 300 422 01/25/1989 Europe						No	
A742	AN1		WO 91/02801 03/07/1991 WHO PCT							Yes No
HH2	A01		1/16427	10/31/1991	WHO PCT					Yes No
ADD	AP1	un o	2/20791	11/26/1992	WIDO PCT					Yes No
W100	TAPI	WO 92			r, Title, Date, Pertinent Pages	, etc.)			
PAG	AR	1	AL	ond Cottosmal	n, S., "Purification of the Bact on," J. Biol. Chem. 257(16): 9658	eriop	hage λ	xis Gene Pro	oduct Requir	ed
ANI	Abremski, K., and Hoess, R., "Bacteriophage P1 Site-specific Recombination - Purification and Properties of the Cre Recombinase Protein," J. Biol. Chem. 259:1509-1514 (1984).									
	Abremski, K., et al., "Bacteriophage P1 Cre-loxP Site-specific Recombination: Site-specific DNA Topoisomerase activity of the Cre Recombination Protein," J. Biol. Chem. 261(1):391-396 (1986).									
EXAMINER	Ш—		Down	dople	1	DAT	E CONSI	DERED //-	3.00	
EXAMINER: In	itial i	f refer		and wheelers	not citation is in conformance	with N	MPEP 609). Draw lin	e through	
citation if n	ot in c	onforma	nce and not	considered. Ind	lude copy of this form with nex	r com	nurreat	On to Apper		

Page 2 of 62

					ATTY. DOCKET NO. 0942.4640001 APPLICATION NO. 09/438,358					
	F	ORM PT	0-1449		APPLICANT					
<u>INF</u>	ORMATIO	N DISCI	LOSURE STATE	<u>MEŅT</u>	Gerard et al.		GROUP			
					November 12, 1	1999	1636			
				U.S.	PATENT DOCUMENTS	s				
EXAMINER INITIAL	*	DOCUM	ENT NUMBER	DATE	NAME		CLASS	SUB-CLASS	FILING DATE	
RAZ	AA2	5,677		10/14/1997	Devine et al.		435	20.1	03/02/1994	
77.77	AB2	5,677	,177	10/14/1997	Wahl et al.		435	325	06/07/1995	
	AC2	5,710	,248	01/20/1998	Grose, C.F.		530	327	07/29/1996	
	AD2	5,723		03/03/1998	Oliver et al.		800	208	06/07/1995	
E JO		5,733	,733	03/31/1998	Auerbach, J.I.		435	6	02/01/1996	
18	AFZ	5,733		03/31/1998	Johnson et al.		435	320.1	06/10/1996	
0 %	AG2	5,744		04/28/1998	Hodges et al.		435	172.330.1	03/08/1996	
1	AH2€	5,766		06/16/1998	Shuman, S.		435	91.41	12/19/1994	
\	ASS	5,776		07/07/1998	Baum et al.		424	93.2	09/20/1996	
PATENT &	12	5,830		11/03/1998	Bushman, F.D.		435	69.7	06/05/1995	
HA2	AK2	5,837		11/17/1998	Holliger et al.		424	136.1	05/14/1996	
7/ 7/ (2)	7442	7.00			ON PATENT DOCUME	NTS				
EXAMINER INITIAL		DOCUM	IENT NUMBER	DATE	COUNTRY		CLASS	SUB-CLASS	TRANSLATION	
AGA	AL2		3/15191	08/05/1993	450 PCT				Yes No	
ADD	AM2	WO 93	3/19172	09/30/1993	WHO POT				Yes No	
AA2	AN2	CA 2	,141,412	02/17/1994	Canada			ļ	Yes No	
HAZ	A02	WO 94	4/17176	08/04/1994	yuro PaT				Yes No	
AAL	AP2	WO 97	7/06265	02/20/1997	WIDE POT				Yes No	
			OTHER ((Including Author	, Title, Date, P	ertinent Pages,	etc.)			
FAZ	AR	AR 2 Abremski, K., et al., "Studies on the Properties of P1 Site-Specific Recombination: Evidence for Topologically Unlinked Products Following Recombination," Cell 32:1301-1311 (1993).								
ADJ	AS	Adams, D. E., et al., "Cre-lox Recombination in Escherichia coli Cells: Mechanistic Differences from the in Vitro Reaction," J. Mol. Biol. 226:661-673 (1992).								
AAZ	AT	Andrews, B.J., et al., "The FLP Recombinase of the 2μ Circle DNA of Yeast: Interaction with Its Target Sequences," Cell 40:795-803 (1985).								
EXAMINER	L		2116	6.611	<u> </u>		DATE CONSI	DERED //-	7.00	

										Page 3 of 6
					ATTY. D 0942.46	OCKET NO. 340001		APPLICA 09/438,	TION NO. 358	
		FORM PT			APPLICA Gerard					
INF	FORMAT I	ON DISC	LOSURE STATE	<u>MENT</u>	_			GROUP		
					FILING DATE GROUP November 12, 1999 1636					
				U.S.	PATENT D	OCUMENTS			·	
EXAMINER INITIAL		DOCUM	ENT NUMBER	DATE	NAME		CLA	ıss	SUB-CLASS	FILING DATE
DF3	AA3	5,843		12/01/1998	Devine, S	s.E., et al	435	<u> </u>	69.1	11/18/1994
7	AB3	5,851		12/22/1998	Elledge (et al	435	<u> </u>	91,4 5.571	02/28/1997
	AC3	5,858		01/12/1999	Winter e	t_a1	435	5	6	06/07/1995
1	AD3	5,871		02/16/1999	Winter e	tal.	435	5	6	03/31/1994
DE TOP	AE3	5,874		02/23/1999	Szybalsk	i, W.	435	5	91.1	11/21/1997
	AF3	5,888		03/30/1999	Hartley	et al.	435	5	6	06/07/1996
	AG3	5,916		06/29/1999	Bushman,		435	5	325	04/17/1998
रहे हैं	AH3	5,919		07/06/1999	Graham e	t al.	435	5	172.391.4	06/07/1995
-3 SA	AI3	5,928		07/27/1999	Leboulch	et al.	435	5	172.3456	11/05/1996
- Marie Marie	AJ3	5,989		11/22/1999	Luo et a		43!	5	91.2	08/12/1997
1200	AK3	6,010		01/04/2000	Griffith	s et al.	43!	5	69.7	05/29/1996
W N /	WYD	0,010	,,504			DOCUMENTS				
EXAMINER	<u> </u>	T						ASS	SUB-CLASS	TRANSLATION
INITIAL	ļ	DOCUM	MENT NUMBER	DATE	COUNTRY		- LL	<u></u>	300 CLA33	Ye
277	AL3	WO 97	7/09436	03/13/1997	WAR F	CT	-			N
HH2	AM3	WO 97	7/25446	07/17/1997	14PO P	OCT				Ye N
DAJ	AN3	WO 97	7/32481	09/12/1997	HIPO F	OCT				Ye N
772	AO3		8/10086	03/12/1998	ا 6 <i>م</i> ہیں	PCT	-			Ye N
DAS			9/10488	03/04/1999	HIPO F	POT				Y e
ANTO	AP3	WU 9				Date, Pertinent	Pages, etc.)		
AAJ	AR	3		ot a? Wint	coraction	of the FLP Recomb s," Mol. Cell. Bi	inase of t	he Sacch	aromyces cer 186).	revisiae 2 μm
AND	AS	Anton, M., and Graham, F.L., "Site-Specific Recombination Mediated by an Adenovirus Vector Expressing the Cre Recombinase Protein: a Molecular Switch for Control of Gene Expression," J. Virol. 69:4600-4606 (1995).								
HAZ	AT	Araki, H., et al., "Site-specific Recombinase, R, Encoded by Yeast Plasmid pSR1," J. Mol. Biol. 225:25-37 (1992).								
EXAMINER	1		Terald S	2/11/	,		DAT	E CONSID	ERED //-	3-08
		<i>w</i>	once conside	ned shother hr	not citati	ion is in conform	ance with M	1PEP 609	. Draw line	e through
EXAMINER: Ini	itial i	t retere onforma	ence conside nce and not	considered. Inc	lude copy	of this form wit	h next comm	nunicatio	on to Appli	cant
CITATION II NO) III C	o, i o i mai								

Page 4 of 62

				ATTY. DOCKET NO. 0942.4640001		CATION NO. 8,358		
		FORM PTO-1449		APPLICANT Gerard et al.				
<u>1</u> 1	<u>NFORMAT I</u>	ON DISCLOSURE STAT	<u>EMEN I.</u>	FILING DATE GROUP November 12, 1999 1636				
			U.	S. PATENT DOCUMENTS				
XAMINER NĮTIAĻ		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE	
AFA	AA4	6,063,627	06/16/2000	McVey et al.	435	440	02/25/1998	
	AB							
	AC			 				
(E)	AD							
A E 20	AE					 		
) 8 May	<u> </u>	<u> </u>						
387 1 8 2	Signal Control							
30	H H		 					
W & THE	AI	 						
· · · · · · · · · · · · · · · · · · ·	AJ							
	AK		FOR	EIGN PATENT DOCUMENTS				
EXAMINER							TRANSIATION	
INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION Yes	
							No.	
	AL_						Yes	
	АМ				- 4		No.	
							Yes	
	AN						Yes	
	AO						No.	
	10						Ye:	
	AP							
Mo	2 AR	Anges P	et al "The i	ntegrase family of site-spectors (1986).		es: regional s	similarities and	
	AS	4 Atlung attachmer	ot al., MA vo	ersatite method for integrati richia coli," Gene 107:11-17	ion of genes and (1991).	gene fusions	into the λ	
	AT	4 Ausubel, Biology,	F.M., et al., " John Wiley & Soi	Maps of Plasmids pBR322 and pass, Inc., Boston, MA, (1995)	pUC19," in <i>Curre</i> .	nt Protocols 1	in Molecular	
EXAMINER		June A	///		DATE CON	SIDERED //-	3.00	
	4	7//	111 . 1.	r not citation is in conform				

SEP 20 2000 Page 5 of 62

FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT OVERLAGE TO DOCUMENTS U.S. PATENT DOCUMENTS U.S. PATENT DOCUMENTS U.S. PATENT DOCUMENTS AA AB AB AC AC ADD ADD ADD ADD ADD ADD ADD ADD A						
U.S. PATENT DOCUMENTS U.S. PATENT OCCUMENTS AMINER HITIAL AA AB AC AD AC AD AE FOREIGN PATENT DOCUMENTS XAMINER NITIAL AN AN AN AN AN AN AN AN AN						
AA AB AC AD AE FOREIGN PATENT DOCUMENTS CLASS SUB-CLASS FILING D CLASS SUB-CLASS TRANSLA AL AN AN AN AN AN AN OTHER (Including Author, Title, Date, Pertinent Pages, etc.)						
DOCUMENT NUMBER DATE NAME AA AB AB AC AD AE AD AI AI AI AI AI AN AN AN AN AN						
AA AB AC AD AD AB AC AD AD AB AC AD AD AC AD AC AD AC AC AD AC AC	TE					
AC AD AD AE AE ATA ATA AJ AJ AK FOREIGN PATENT DOCUMENTS XAMINER NITIAL AL AN						
AD PECA AE STANDAI AJ AK FOREIGN PATENT DOCUMENTS XAMINER NITIAL AL AN AN AN AN AN AN AN AN						
AI A						
AJ AK FOREIGN PATENT DOCUMENTS XAMINER NITIAL AL AM AN AN AN AN AN AN AN AN AN						
AJ AK FOREIGN PATENT DOCUMENTS KAMINER NITIAL AL AN AN AN AN AO AP OTHER (Including Author, Title, Date, Pertinent Pages, etc.)						
AJ AK FOREIGN PATENT DOCUMENTS CAMINER NITIAL AL AM AN AN OTHER (Including Author, Title, Date, Pertinent Pages, etc.)						
AJ AK FOREIGN PATENT DOCUMENTS CLASS SUB-CLASS TRANSLA AL AM AN AN OTHER (Including Author, Title, Date, Pertinent Pages, etc.)						
AN A						
FOREIGN PATENT DOCUMENTS XAMINER NITIAL AL AM AN AN AO OTHER (Including Author, Title, Date, Pertinent Pages, etc.)						
FOREIGN PATENT DOCUMENTS KAMINER NITIAL AL AM AN AO OTHER (Including Author, Title, Date, Pertinent Pages, etc.)						
AL AN AN AN AN AN AO OTHER (Including Author, Title, Date, Pertinent Pages, etc.)						
AL AN AN AN AN OTHER (Including Author, Title, Date, Pertinent Pages, etc.)						
AL AM AN AO AP OTHER (Including Author, Title, Date, Pertinent Pages, etc.)	ION					
AN AN AO OTHER (Including Author, Title, Date, Pertinent Pages, etc.) OTHER (Including Author, Title, Date, Pertinent Pages, etc.)	Y					
AN AN AO OTHER (Including Author, Title, Date, Pertinent Pages, etc.) OTHER (Including Author, Title, Date, Pertinent Pages, etc.)	Y					
AN AO OTHER (Including Author, Title, Date, Pertinent Pages, etc.) OTHER (Including Author, Title, Date, Pertinent Pages, etc.)	1					
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)	Y					
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)	!					
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)	Ye					
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)	Υ.					
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)						
is by the Polymorasa Chain reaction." in: Current Protoco						
Ausubel, F.M., et al., "Mortagenesis by the Polymerase Chain reaction," in: Current Protoco Molecular Biology, Boston: John Wiley \$ Sens, Inc., pp. 8.5.1-8.5.9 (1995).						
	in.					
260 Sept. 1 Riol Chem. 260	12313					
Babineau, D. et al., "The FLP Protein of the 2-micro Plasmid of Yeast," J. Biol. Chem. 260 12391 (1985).						
Balakrishnan, R., et al., "A gene cassette for adapting Escherichia coli strains as hosts att-Int-mediated rearrangement and $p_{\rm L}$ expression vectors," Gene 138:101-104 (January 1994)	Balakrishnan, R., et al., "A gene cassette for adapting Escherichia coli strains as hosts for att-Int-mediated rearrangement and $p_{\rm L}$ expression vectors," Gene 138:101-104 (January 1994).					
EXAMINER LILLING DATE CONSIDERED 11-3-00						
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.						

Page 6 of 62

					ATTY. DOCK			LICATION NO. 438,358		
		FORM PTO			APPLICANT Gerard et					
<u>IN</u>	IFORMAT IC	ON DISCL	OSURE STATE	MENT_	FILING DAT	FILING DATE November 12, 1999 GROUP 1636				
				U	.s. PATENT DOCU					
EXAMINER	T				NAME		CLASS	SUB-CLASS	FILING DATE	
INITIAL	 	DOCUME	NT NUMBER	DATE	NAPIL					
	AA	 			_					
	AB	┼								
	AC	+-								
	AD	+								
DEV	AE -	+								
(A) (A)	1 22 -	┪								
0 4	AHE AHE	+		 						
1 30		+								
		+							ļ	
PATENT 8	MAJ									
	AK				REIGN PATENT DO	CUMENTS				
		т		T	XC IGN TANGENT				TO A NO. AT LON	
EXAMINER		DOCUM	ENT NUMBER	DATE	COUNTRY		CLASS	SUB-CLASS		
INITIAL		1					l l		Yes No	
	AL								Yes	
					}				No	
	AM								Yes	
	AN	1		Ì					No	
	AN	+							Yes No	
	AO								Yes	
					l l				No	
	AP				the Title Da	ite, Pertinent Page	es. etc.)			
			OTHER	(Including AL	ithor, litte, be	ite, referment sus				
742	AR	6	Bayley, C. site speci	C., et al., " fic recombina	Exchange of gen tion system," P	e activity in tran Plant Mol. Biol. 18	nsgenic pla 1:353-361 (1	nts catalyzed b 1992).	y the Cre-lox	
AHO	As	6	Bethke, B stress ac 2834 (July	tivation of th	3., "Segmental s ne p53 promoter	genomic replacemen in single-copy tr	t by Cre-me ansformants	ediated recombin s," <i>Nucl. Acids</i>	nation: genotoxic Res. 25:2828-	
HAS	2 AT	6	Bernard, P., and Couturier, M., "Cell Killing by the F plasmid Ccdb Protein Involves Poisoning of DNA-topoisomerase II Complexes," J. Mol. Biol. 226:735-745 (1992).							
EXAMINER		-	rald A	1111	/		1		7-00	
					or not citatio	on is in conformand	ce with MPE	P 609. Draw li	ne through	
EXAMINER: citation if	Initial not in	if refe	rence considence and not	considered.	Include copy of	of this form with	next commun	nication to Appl	icant.	

Page 7 of 62

					ATTY. DOCKET NO. 0942.4640001		APPLICA 09/438	TION NO. F	RECEIVE	
	F	ORM PTO	- 1449		APPLICANT				SEP 2.0.2000	
<u> 1NI</u>	FORMATIO	N DISCLO	OSURE STATEM	<u>IENT</u>	Gerard et al. FILING DATE November 12, 1999	FILING DATE GROUP				
				U	.S. PATENT DOCUMENTS			1		
MINER		DOCUME	NT NUMBER	DATE	NAME	c	LASS	SUB-CLASS	FILING DATE	
TIAL	AA									
	АВ			<u> </u>						
	AC									
	AD	 						<u> </u>		
OE 4	AE .	├ ──						 	 	
7,	AGE!	+						 		
7 8 200	AHE							<u> </u>		
क्ष	AR									
ATENT &	87									
CIVILOR	AK			<u> </u>	OREIGN PATENT DOCUMENTS					
					UKEIGN PATENT DOGGTENTO			aup 61 466	TRANSLATION	
AMINER ITIAL		DOCUM	ENT NUMBER	DATE	COUNTRY		CLASS	SUB-CLASS	Ye	
ITTAL									N	
	AL			+					Ye	
	АМ							+	Ye	
				1					N N	
	AN			+					Ye	
	AO			 					Ye	
	1.5									
	AP		OTHER	(Including A	uthor, Title, Date, Pertir	nent Pages, e	tc.)			
HAZ	AR	7	Bernard, F	o., "Positive	Selection of Recombinant	DNA by CcdB,	□ BioTech	niques 21 :32	0-323 (1996).	
N 40	Zas	Z	Betz, U. recombina	A. K., et al. tion," Curr.	, "Bypass of lethality wit Biol. 6:1307-1316 (1996).	th mosaic mic	ce genera	ted by Cre-7	oxP-mediated	
	AT	Z	Bhandari, overprodu (July 199	action of clo	shankar, J., "An Escherich ned gene products with NaC	ia coli host Clas the ind	strain u lucer," J.	seful for ef Bacteriol 1	ficient 79:4403-4406	
MARA	l	Į.	Į.							
EVANT NED			1.	11/4/	or not citation is in co		DATE CON	//	1-3-00	

Page	8	of	62

FORM	PTO-1449
------	----------

INFORMATION DISCLOSURE STATEMENT

APPLICATION NO. 09/438,358 ATTY. DOCKET NO. 0942.4640001 APPLICANT Gerard et al.

<u> 1 N F</u>	FORMAT IC	N DISCI	LOSURE STATE	<u>EMENT</u>	FILING DATE GROUP November 12, 1999 1636					
				U.S.	PATENT DOCUMENTS			г		
EXAMINER INITIAL		DOCUME	NT NUMBER	DATE	NAME	CLA	ss	SUB-CLASS	FILING DATE	
INTTAL	AA					+				
	AB					-		 -		
	AC					+-		ti		
	AD					+-				
JC783	AE									
Y-7 Y-7 X	AF	<u> </u>		 						
	AG	 								
8 XX	AH			 				 		
- 🗟 - 👸	AI	 						<u> </u>		
OUTCH! BUT	AK	 								
	AK			FORE	GN PATENT DOCUMENTS			т	т	
EXAMINER		T				l cu	ASS	SUB-CLASS	TRANSLATION	
INITIAL	L	DOCUM	ENT NUMBER	DATE	COUNTRY	- "			Yes	
									No	
	AL	+							Yes No	
	АМ	<u></u>				+		 	Yes	
	AN	+		Y						
	AO					+			No Yes	
					}	1			No	
	AP			1 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	r, Title, Date, Pertinent Pages	. etc	.)			
			OTHER	(Including Autho	or, Title, bate, Teremane Tegen					
A HO	AR	8	Black, L.V lambda DNA	1., "In vitro pac As," <i>Gene 46:</i> 97-1	kaging into phage T4 particles 01 (1986).	and s	pecific	recirculari	zation of phage	
AHY	AS	8	Bloch, C.A., et al., "Purification of Escherichia coli Chromosomal Segments without Cloning," Biochem. Biophys. Res. Comm. 223:104-111 (1996).							
442	AT	8	Bochner, 143:926-9	Bochner, B. R., et al., "Positive Selection for Loss of Tetracycline Resistance," J. Bacteriol. 143:926-933 (1980).						
EVANINED				L 11 M	1111	DA	TE CONS	IDERED	7-00	
EXAMINER				Swald A		 with	MPEP 6	ng. Draw li	ne through	
EXAMINER: In citation if	nitial i not in c	f refer	rence considerance and not	dered, whether or considered. Ir	not citation is in conformance	xt co	mmunica	tion to Appl	icant.	

					ATTY. DOCKET	NO.	APPLIO 09/438	ATION NO.	
		FORM PTO-	1449		0942.4640001 APPLICANT		1 027 .00		
TNS			SURE STATE	<u>MENT</u>	Gerard et al.		GROUP		
1111	ORTINITE	<u> </u>			FILING DATE November 12,	1999	1636		
				U.	S. PATENT DOCUMENTS	s			
XAMINER				DATE	NAME		CLASS	SUB-CLASS	FILING DATE
NITIAL		DOCUMENT	NUMBER	DATE	NAME				
	AA								
	AB	 							
	AD								
	AE								
£	AF								
Sold S	AG								
18	AH							 	
\$	AI	ļ		 					
الآثاء	AJ	 		<u> </u>					
A TEN	AK			FO	REIGN PATENT DOCUME	NTS			
	Τ	T		T	KEIGH TATEN. DOSS.				TRANSLATION
EXAMINER INITIAL		DOCUMEN	IT NUMBER	DATE	COUNTRY		CLASS	SUB-CLASS	Yes
									No
	AL								Yes No
	AM						 		Yes
	T.,,								No
	AN	29k F							Yes No
	AO	1		-					Yes No
	AP								NO
			OTHER	(Including Au	thor, Title, Date,	Pertinent Pages,	etc.)		
	AR ,	9	loyd, A. C ended DNA	., "Turbo clor fragments into	ning: a fast, effic o plasmids," NDs].	ient method for Acids Res. 21/4):	Coning PCR 817-821 (19	products and 93).	d other blunt
AAA	AS	2	Broach, J. 29:227-234	R., et al., '	Recombination with	in the Yeast Plas	smid 2μ Cir	cle is Site-	Specific," <i>Cell</i>
AAL	AT	9 I	Brunelli, Designed 1 1318 (1993	for Directiona	l, M. L., "A Series ol Cloning of cDNAs	s of Yeast/Escher and cre/lox-Medi	ichia coli ated Plasmi	λ Expression d Excision,	Vectors Yeast 9:1309-
EXAMINER	1	<u>_</u>	1.1	11			DATE CONS	IDERED //-	3-00
		vald s		/-/-	or not citation is	in conformance w	ith MPEP 6	09. Draw li	ne through
EXAMINER: In	nitial i not in c	f referer conformance	nce consid e and not	considered.	Include copy of th	is form with next	communica	tion to Appl	icant.

Page 10 of 62

FORM	PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 0942.4640001

APPLICATION NO. 09/438,358

RECEIVED

APPLICANT

Gerard et al. FILING DATE November 12, 1999

GROUP 1636

SEP 2 0 2000

					NOVEHIDET TE,				
				υ	S. PATENT DOCUMEN	TS		TECH	CENTER 1000/290(
XAMINER					r		CLASS	SUB-CLASS	FILING DATE
NITIAL		DOCUM	MENT NUMBER	DATE	NAME		CEAGO	000 00.33	
	AA								
	AB	├					<u> </u>		
	AC	├ ─							
	AD	_							
	AE	├ ─							
	AF	 							_
DE JO	- Jag	 		 					
O GM	AK	├		 					
8.	AIS	—		<u> </u>					
<u> </u>	A.E	┼		 					
All marie 1	S Y				TALENT DOCUM	ENTE			
MIENT &				T FO	REIGN PATENT DOCUM	ENIS	T		
EXAMINER		DOCH	MENT NUMBER	DATE	COUNTRY		CLASS	SUB-CLASS	TRANSLATION
INITIAL		70000	HENT HONDER	1					Yes No
	AL								Yes
					0		100		No
	AM	 		-					Yes
		1							No
	AN	7							Yes
	AO			1					Yes
									No
	AP				Title Date	Postinent Pages	etc)		
			OTHER_	(Including Aut	thor, Title, Date,	Per tillent Pages,	<u> </u>		
AAJ	AR	<u>10</u>	Brunelli, Recombinat	J.P., and Pall ion," <i>BioTechn</i>	, M.L., "Lambda/Pi iques 16(6):1061-1	lasmid Vector Cons 064 (1994).	struction b	y In Vivo cre	/lox-Mediated
AAJ	AS	10	Bubeck, P. 21:3601-36	, et al., "Rap 02 (1993).	oid cloning by hom	ologous recombina	tion in viv	o ," Nucl. Aci	ds Res.
FAI	AT	10	Buchholz, targets in	F., et al., ", n genomic mani	A simple assay to pulation construct	determine the fun s," Nucl. Acids Re	ctionality es. 24(15):	of Cre or FL 3118-3119 (19	P recombination 196).
EXAMINER			1	11/	11 1		DATE CONS	IDERED //	3.00
			Neal	dAfe	y. /)		ith MDED 44		
EXAMINER: In	itial i	frefe	rence consid	ered, whether	or not citation is Include copy of th	s in contormance was form with next	nth MPEP of communica	tion to Appli	cant.
citation if n	ot in c	onform	ance and not	considered.	metude copy or ti				

					ATTY. DOCKET 0942.4640001	NO.		CATION NO. 8,358	
		FORM PT			APPLICANT Gerard et al				
<u>1</u> 1	NFORMATI	ON DISCI	OSURE STATE	<u>EMENT</u>	FILING DATE November 12,		GROUP 1636	· 	
					J.S. PATENT DOCUMEN				
	τ	1			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			OUD CLASS	FILING DATE
EXAMINER INITIAL		DOCUME	NT NUMBER	DATE	NAME		CLASS	SUB-CLASS	FIELING DATE
	AA							 	
	AB								
	AC	↓		 					
	AD	<u> </u>							
	AE								
	AF	 -		 					
E JG	AG	┼		 					
/Y	AG AREA AJM								
0, 19	ANS	╂───							
133	AJX								
	1400			F	OREIGN PATENT DOCUM	IENTS			τ
DATE S	Ÿ	T					CLASS	SUB-CLASS	TRANSLATION
EXAMINER INITIAL		DOCUM	ENT NUMBER	DATE	COUNTRY		CLASS	300 32.1.5	Yes
									No
	AL	-							Yes
	AM						 	+	Yes
									No
	AN								Yes
	AO								Yes
		1							No
	AP			<u> </u>	uthor, Title, Date,	Pertinent Pages,	etc.)		
			OTHER	(Including A	utnor, Title, Date,	Terrement 7 - 5 - 5			
772	AR	11	Buchholz, applied si	F., et al., ite-specific	Different thermost recombination," <i>Nuc</i>	abilities of FLP a 1. Acids Res. 24(2.	nd Cre red 1):4256-42	combinases: i 62 (1996).	mplications for
Ala	? As	11	Bushman, 1	W., et al., "(11 (1985).	Control of Directio	onality in Lambda S	Site Speci	fic Recombina	ction," Science
THO	Z AT	11	Campbell, 174(23):7	A. M., "Chro	omosomal Insertion ()2).	Sites for Phages a	nd Plasmic	ds," J. Bacter	riol.

EXAMINER: Initial if reference considered, whether or not ditation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

EXAMINER

DATE CONSIDERED

Page 12 of 62

					ATTY. DOCKET NO.		APPLI	CATION NO.	CUEIVED
		EODM D	PTO-1449		0942.4640001		09/43	8,358	SEP 202000
	_			EMENT	APPLICANT Gerard et al.				
<u>1N</u>	IFORMAT	ION DIS	CLOSURE STAT	<u>EMENT</u>	FILING DATE November 12, 1999		GROUP 1636	TEC	WIER IEDOUGOED
				U.	S. PATENT DOCUMENTS				
EXAMINER						CL/	166	SUB-CLASS	FILING DATE
INITIAL		DOCUM	IENT NUMBER	DATE	NAME	- 027	133	005 02/05	
	AA	-							
	AB	+							
	AC AD	+-							
		+							
E 100	AF	†						<u> </u>	
SE 1C.	G								
O a fille	属								
	ě								
- \$\frac{1}{2}	NJ.							+	
MATCHT & CA	AK				DATENT DOCUMENTS				
				FOR	REIGN PATENT DOCUMENTS			Ţ	
EXAMINER INITIAL		DOCU	MENT NUMBER	DATE	COUNTRY	CL	ASS	SUB-CLASS	TRANSLATION
THITTAL									Yes No
	AL								Yes No
	AM				_				Yes
	AN								Yes
	AO								No
	10-								Yes
	AP		OTHER	(Including Aut	hor, Title, Date, Pertine	nt Pages, etc	.)		
			OTHER	(Including Aut	nor, Treee, Bace, 10. com				
AAd	AR	12	Chapin, S. repertoire	J. et al., "Dir of structural	fferential expression of a ly different microtubule-b	alternatively binding domain	spliced	i forms of MA ochem. 34:228	NP4: a 19-2301 (1995).
PDA	AS	12			ren, J.S., "Isolating lar y <i>in vivo</i> P1 packaging of nsposed <i>loxP</i> site," <i>Nucl</i> .				
772	AT	12	Craig, N.I specific I	L. and Nash, H. breakage of DNA	A., "The mechanism of pha by Int topoisomerase," $\mathcal C$	ge lambda sit Ce11 35: 795-8 0	e-speci 3 (1983	fic recombin	ation: site-
				2.1	1 1 1	DA	TE CONS	IDERED	

Page 13 of 62

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

					November 12, 1999					
				U.S.	PATENT DOCUMENTS		T			
EXAMINER INITIAL		DOCUM	ENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE		
	AA						 			
	AB						 			
	AC									
	AD									
	AE									
	AF						_			
PE JOY	AG						 			
VE 10%	AH.						_			
9.48	8									
	倝				<u> </u>					
- 2	AK									
MIFNI & LINE				FORE	IGN PATENT DOCUMENTS					
EXAMINER						01.455	SUB-CLASS	TRANSLATION		
INITIAL		DOCUM	MENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	Yes		
					1	Ì		No.		
	AL	├ ──						Yes		
	AM				·			No		
	AM	+						Yes		
	AN							No.		
					\.			Yes		
	AO							Yes		
					ļ			No		
	AP				or, Title, Date, Pertinent Pag	ges etc.)				
			OTHER	(Including Autho	F, Title, bate, referience va.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
AHJ	AR	13	Cox, M.M., recombinat	"The FLP protei ion system in Es	n of the yeast 2-μm plasmid: cherichia coli," Proc. Natl. A	Expression of Acad. Sci. USA 8	a eukaryoti 30:4223-4227	genetic (1983).		
AAJ	AS	13	Dale, E. C mediated b	. and Ow, D. W., y bacteriophage	"Intra- and intermolecular s P1 recombinase," <i>Gene 91</i> :79-8	site-specific re 35 (1990).	ecombination	in plant cells		
7772	АТ	13	Dale, E. C. and Ow, D. W., "Gene transfer with subsequent removal of the selection gene from the host genome," <i>Proc. Natl. Acad. Sci. USA 88</i> :10558-10562 (1991).							
EXAMINER	1		Lora	44	1/2	DATE CONS		3.00		
EXAMINER: Ini					not citation is in conforman	ice with MPEP 60	9. Draw lir	ne through		

Page 14 of 62

APPLICATION NO.

					ATTY. DOCKET NO. 0942.4640001		PPLICATION NO. 19/438,358			
		FORM PTO			APPLICANT Gerard et al.					
<u>inf</u>	ORMATIC	ON DISCL	OSURE STATE	<u>EMENT</u>	FILING DATE November 12, 1999		GROUP 1636			
				U.S.	PATENT DOCUMENTS					
MINER				DATE	NAME	CLASS	SUB-CLASS	FILING DATE		
TIAL		DOCUME	NT NUMBER	DATE						
	AA	 								
	AB	 						 		
	AD									
	AE									
	AF	1								
SE VC										
	~			<u> </u>						
B THE	AE									
4	N. T.			<u> </u>	 					
		<u> </u>		<u> </u>	POSITIVE POSITIVE NATE					
MIFUT & TO	7			FORE	IGN PATENT DOCUMENTS					
AMINER		T	-u- MARCED	DATE	COUNTRY	CLAS	SS SUB-CLAS			
ITIAL	 -	DOCUM	ENT NUMBER	DATE				Ye		
	AL	1						Ye		
	1					1		N		
	AM				 			Ye		
	\	1		1				Ye		
	AN	+								
	AO _	1						Y		
	AP			At a luding Auth	nor, Title, Date, Pertine	nt Pages, etc.)			
777	AR	14			N., "Use of a Yeast Sit Nevelop. Genetics 13: 367-3	e-Specific Reco		rate Embryonic		
AHJ	AS	14	Degryse,	E., "In vivo in tions," <i>Gene 170</i> :	termolecular recombinatio :45-50 (1996).	on in Escherich	ia coli: applica	tion to plasmid		
AAS	AT	14	Devine, S. E., and Boeke, J.D., "Efficient integration of artificial transposons into plasmid targets in vitro: a useful tool for DNA mapping, sequencing and genetic analysis," Nucl. Acids Res. 22(18):3765-3772 (1994).							
				rald A		DAT	E CONSIDERED	-3-00		
EXAMINER										

Page 15 of 62

					ATTY. DOCKET NO. 0942.4640001		09/438	,358	
		FORM PT			APPLICANT Gerard et al.				
1	INFORMATI	ON DISCI	OSURE STATI	<u>MEN I</u>	FILING DATE November 12, 1999		GROUP 1636		
				U.	S. PATENT DOCUMENTS				
EXAMINER	T	DOCUME	NT NUMBER	DATE	NAME	CL	ASS	SUB-CLASS	FILING DATE
INITIAL	HAA -	DOCUME	10000						
	AB								
	AC	1						 	
	AD								
	AE								
	AF								
OE JOY	AG								
0.000	23 AH			<u> </u>					
8,0	à AI			 					
-8	AJ AJ			 					
- 2	AK				REIGN PATENT DOCUMENTS				
74TENT &				TFC	REIGN FATERI DOSS.				TRANSLATION
EXAMINER		DOCUM	ENT NUMBER	DATE	COUNTRY	<u>c</u>	LASS	SUB-CLASS	Yes
INITIAL									No
	AL					= = = = = = = = = = = = = = = = = = = =			Yes
									No Yes
ļ	AM_								No
	AN								Yes No
	AO								Yes
		Ì			7.7				No
	AP		OTHER	(Including Au	thor, Title, Date, Pert	inent Pages, et	c.)		
AH	AR	<u>15</u>			"New Cloning Vectors for romosome," Plasmid 28:14	r Integration i		Attachment	Site attB of
HAG) AS	15	Dymecki, site-spec	S. M., "A modu	ular set of Flp, FRT and ation," <i>Gene 171</i> :197-201	<i>lacZ</i> fusion ve (1996).	ctors fo	r manipulati	ng genes by
AX	Z AT	15	l genes by	s. J., et al. complementati 1735 (1991).	, "λYES: A multifunction on of yeast and <i>Escheric</i>		sion vectors," Pr		
EXAMINER			1	wold A	h/1-5			(/	-3.00
EVANTAIED.	Initial	if refe	rence consi	dered, whether	or not citation is in a Include copy of this for	conformance wit	h MPEP 6	09. Draw li tion to App	ne through licant.
citation i	f not in	conform	ance and no	t considered.	or not catation is in Include copy of this f	O. III AT CIT. MONEY			

Page 16 of 62

FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 0942.4640001

November 12, 1999

APPLICATION NO. 09/438,358

APPLICANT

Gerard et al.

GROUP 1636

U.S. PATENT DOCUMENTS FILING DATE SUB-CLASS CLASS EXAMINER NAME DATE DOCUMENT NUMBER INITIAL AA ΑB AC AD ΑE ΑF FOREIGN PATENT DOCUMENTS TRANSLATION CLASS SUB-CLASS EXAMINER COUNTRY DOCUMENT NUMBER DATE INITIAL No ΑL Yes No AΜ Yes Νo AN Yes No AO Yes No ΑP OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Feil, R., et al., "Regulation of Cre Recombinase Activity by Mutated Estrogen Receptor Ligand-Binding Domains," Biochem. Biophys. Res. Comm. 237:752-757 (August 1997). AR <u>16</u> Ferguson, J., et al., "Construction and characterization of three yeast-Escherichia coli shuttle vectors designed for rapid subcloning of yeast genes on small DNA fragments," Gene 16:191-197 <u>16</u> (1981). Filutowicz, M., et al., "Purification of the Escherichia coli integration host factor (IHF) in one chromatographic step," Gene 147:149-150 (1994). <u>16</u> ΑТ DATE CONSIDERED EXAMINER EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Page 17 of 62

					ATTY. DOCKET NO. 0942.4640001		09/438,			
		ORM PTO			APPLICANT Gerard et al.					
INFO	ORMAT 10	N DISCL	OSURE STAT	<u>EMENT</u>	FILING DATE November 12, 1999		GROUP 1636			
				U.S	. PATENT DOCUMENTS		т			
MINER		DOCUME	NT NUMBER	DATE	NAME	CL#	ss	SUB-CLASS	FILING DATE	
TIAL A	VA									
	AB									
	AC				 					
/	AD		<u>. </u>	 	 					
	AE			 						
	AF			 	 					
OF JO	AG			 						
- 100 P	NA									
O Je Lillin	AB	├								
-50	A CALL	┼								
- Jap	///			FORE	IGN PATENT DOCUMENTS			τ	T	
ATTENT & TRA		Τ				C	LASS	SUB-CLASS	TRANSLATION	
KAMINER NITIAL		DOCUM	ENT NUMBER	DATE	COUNTRY				Ye	
								<u> </u>	N	
	AL	+		+					Ye	
	AM							 	Ye	
									N N	
	AN								Ye	
ļ	AO			<u> </u>				 	Ye	
						1_				
	AP				nor, Title, Date, Pertin	ent Pages, etc	:.)			
H 42	AR	17	Fiering,	s., et al., "An	'in-out' strategy using complex DNA regulatory Sci. USA 90:8469-8473	gene targetin		P recombina the β-glob	ase for the in locus control	
FAR	AS	17	Francia, Integrase	M.V., et al., "(e (Int21)," J. Ba	Gene Integration in the acteriol. 178:894-898 (19	Escherichia co 996).	li Chromo	osome Media	ated by Tn21	
AAA	AT	17	lallows h	Fukushige, S. and Sauer, B., "Genomic targeting with a positive-selection <i>lox</i> integration vector allows highly reproducible gene expression in mammalian cells," <i>Proc. Natl. Acad. Sci. USA</i> 89:7905-7909 (1992).						
EXAMINER	<u> </u>				1/11/	_	ATE CONS		1-3-00	
					or not citation is in co	onformance with	MPEP 60	9. Draw l	ine through	
					- not citation 19 In Co					

Page 18 of 62

FORM	PTO-	1445

INFORMATION DISCLOSURE STATEMENT

APPLICATION NO. 09/438,358 ATTY. DOCKET NO. 0942.4640001 APPLICANT Gerard et al. GROUP 1636 FILING DATE

					November 12, 1999	1030		
				U.S	. PATENT DOCUMENTS		т	
AMINER ITIAL		DOCUME	NT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						 	
	АВ				 		 	
	AC	I		<u> </u>			 	
	AD							
	AE	<u> </u>						
E VC>	AF	↓						
	AG	 						
O July S	5 H	<u> </u>						
<u> </u>	A I			 				
	AJ	<u> </u>		 				
MITENT &	AK				DOCUMENTS			
				FOR	EIGN PATENT DOCUMENTS			
AMINER		DOCUM	ENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
ITIAL		DOCOM	ENI NOPIDER	DATE				Ye
	AL	200_						Υ.
						1	1	
	AM							Ye
								<u> </u>
	AN	1		7				Y
	AO	Ur		- V				Y
	AP				Title Date Portinent	Pages, etc.)		
			OTHER	(Including Aut)	nor, Title, Date, Pertinent	rages, etc.,		
AAA	AR	18	Geoffroy, very large	F., et al., "A antibody reper	new phage display system to rtoires," <i>Gene 151</i> :109-113 (o construct multico (1994).	ombinatorial	libraries of
HAJ	AS	18	Glasgow, 1	A.C., et al., ጣ 89).	ONA-binding Properties of t	he Hin Recombinase	, u J. Biol. (Chem. 264:1 0072
<i>\$42</i>	AT	18	Golic, K. Recombina	G. and Lindqui tion in the Dro	st, S., "The FLP Recombinas osophila Genome," <i>Cell 59:</i> 49			eific
EYAMINER					4/1//	DATE CONS	IDERED /	13-00

Page 19 of 62

					ATTY. DOCKET NO. 0942.4640001		APPLIC 09/438	ATION NO. 3,358	
•		FORM PTO	o-1449		APPLICANT			- 1	
<u>1N</u>	FORMAT I	ON_DISCL	OSURE STAT	<u>EMENT</u>	FILING DATE November 12, 1999		GROUP 1636		
				U.S.	PATENT DOCUMENTS				
EXAMINER INITIAL		DOCUME	NT NUMBER	DATE	NAME	CL	ASS	SUB-CLASS	FILING DATE
	AA								
	AB								
	AC								
	AD								
	AE	 							
10E 0018	AF AG								
- Right	AH)								
O PARTY	AH AH								
\ \$	31							<u> </u>	
MINISTER STEP	AK	<u></u>						<u></u>	
- OLEM				FOREI	GN PATENT DOCUMENTS				
EXAMINER		DOCUME	NT NUMBER	DATE	COUNTRY		LASS	SUB-CLASS	TRANSLATION
INITIAL		DOCOME	NO NOMBER						Yes No
	AL								Yes No
	AM	-							Yes No
	AN	1==						1	Yes No
	AO	+							Yes
	AP				Titl Bata Basti	nont Pogos etc			I NO
			OTHER	(Including Autho	r, Title, Date, Perti	ment Pages, etc			
	AR	19	Gu, H., et	al., "Deletion ene targeting,"	of a DNA polymerase be Science 265:103-106 (1	eta gene segmen 9947.	t in T c	ells using o	eell type-
AAA	AS	19	Guo, F., e Proc. Natl	t al. , "Asymmetr . Acad. Sci. USA	ic DNA bending in the 96:7143-7148 (June 19	Cre- <i>loxP</i> site- 99).	specific	recombinati	on synapse,"
AAJ	АТ	19	Hardy, S., 71(3):1842	et al., "Constr -1849 (March 199	uction of Adenovirus (Vectors through			
				/ .	, 1/ / /	// DA	TE CONSI	DERED	リマーハの

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

EXAMINER

Page 20 of 62

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 0942.4640001	APPLICATION NO. 09/438,358	
APPLICANT Gerard et al.		
FILING DATE November 12, 1999	GROUP 1636	

				U_S	. PATENT DOCUMENTS			
		Т					OUR SI ASS	FILING DATE
EXAMINER INITIAL		DOCUME	ENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						 	
	AB							
	AC							
	AD							
	AE						 	
E JC/	AF						+	
MIN E	AG			<u> </u>			+	
4	АН			L				
& 3	AI		<u> </u>					
and the same	AJ			ļ	 			
PATENT	AK	<u> </u>						
				FORE	IGN PATENT DOCUMENTS		Т	
EXAMINER				DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
INITIAL	 	DOCUM	MENT NUMBER	DATE	00000			Yes
	AL	1						No
	 _	\top					ì	Yes No
	AM				 		- 	Yes
		1						No
	AN	_		0				Yes
	AO							Yes
	†							No.
	AP					nt Pogos etc.)		
			OTHER	(Including Auth	or, Title, Date, Pertine	nt Pages, etc./		
AAA	AR	20	Hasan, N., constructi 151 (1987)	on of improved v	W., "Control of cloned ovectors with a multiple o	gene expression by p cloning site and the	promoter inve p_{tac} promoter	rsion in vivo: -," Gene 56:145-
772	AS	20	Hasan, N.,	, et al., "Escher ids and their in	richia coli genome target n vivo chromosomal integr	ing, I. Cre- <i>lox</i> -med ration and retrieval	iated in vitr ," Gene 150:5	ro generation of 11-56 (1994).
THA	AT	20	lcalection	-Gotoh, T., et a : cDNA cloning w ," Gene 41:125-1	7., "Improved vector, pH with G:C-tailing procedur 28 (1986).	SG664, for direct see and subcloning of	treptomycin-r double-diges	resistance sted DNA
		_L		L/1	1///	DATE CONS	SIDERED	1-3-BB
EXAMINER				While	/ h/			- 100

Page 21 of 62

						ATTY. DOCKET NO. 0942.4640001		APPL10	CATION NO. 3,358	
		FORM PT				APPLICANT Gerard et al.				
<u> IN</u>	FORMATIC	N DISCI	LOSURE STATE	MENT		FILING DATE GROUP November 12, 1999 1636				
					U.S. P	ATENT DOCUMENTS				
								01.400	SUB-CLASS	FILING DATE
EXAMINER INITIAL		DOCUME	NT NUMBER	DATE	N	AME		CLASS	30B CEAGO	
	AA									
	AB									
	AC	<u> </u>								
	AD									
	AE								<u> </u>	
E JC;	AF								 	ļ
100	AR								 	
0 8,000	AIS	 								
B	AJE								 	
1 3	A JE				l					
PATENT &					FOREIG	N PATENT DOCUMENTS			T	
EXAMINER		T		DATE		COUNTRY		CLASS	SUB-CLASS	TRANSLATION
INITIAL		DOCUM	IENT NUMBER	DATE						Yes No
	AL	ļ								Yes
					ļ			1		No
	AM	+		 						Yes No
	AN	-								Yes
				1						No
	AO	+		 -						Yes
	AP									No.
	17.		OTHER	(Including	Author	, Title, Date, Perti	nent Pages, e	etc.)		
AAA	AR	21			al ush	uttle Mutagenesis: B 29-342 (1991).			for Genetic	Manipulations in
ADD	AS	21	Hoess, R.I	i., et al., roc. Natl.	. "P1 sii Acad. Sc	te-specific recombina i.·USA 79:3398-3402	ation: Nucle (1982).	eotide seq	uence of the	e recombining
	AT	21	Hoess R.	H., et al	, "Mecha	nism of Strand Cleav	rage and Exch 2 (1985).	ange in th	ne Cpe-lox Si	ite-specific

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

EXAMINER

DATE CONSIDERED

Page 22 of 62

					ATTY. DOCKET NO. 09/438,358							
		FORM PTO	D-1449		APPLICANT Gerard et al.							
<u>1N</u>	FORMATIC	ON DISCL	OSURE STATE	<u>MENT</u>	FILING DATE November 12, 1999		GROUP 1636					
				υ.	S. PATENT DOCUMENTS							
MINER		DOCUME	NT NUMBER	DATE	NAME	CLAS	SS SUB-CLAS	S FILING DATE				
TIAL	AA	DUCUME	NI NORBER									
	AB											
	AC											
	AD											
	AE											
E 10	AF	 		<u> </u>								
<u> </u>	435	 										
1870	SECTION AND ADDRESS OF THE PROPERTY OF THE PRO	┼──										
\$		-										
	N AK	†										
A THE	<u> </u>			FOI	REIGN PATENT DOCUMENTS		T					
MINER				DATE	COUNTRY	CL	ASS SUB-CLA	SS TRANSLATION				
TIAL		DOCUM	ENT NUMBER	DATE	CONTAC			Y				
	AL		*					Υ.				
	AM							Y				
	AN							Y				
	AO	+						Y				
	AP											
			OTHER	(Including Aut	thor, Title, Date, Pertine	ent Pages, etc.	.,					
AAA	- AR	22	recombinat	et al., "Form	nation of small circular D Gene 40:325-329 (1985).	ONA molecules v	ia an in vitro s	ite-specific				
	AS	22		Hoess, R. H., et al., "The role of the lox" spacer region in Pa site-specific recombination," Nucl. Acids Res. 14(5):2287-2300 (1986).								
H Do	AT	22	Molecular	Hoess, R. H., and Abremski, K., "The Cre-lox Recombination System," in: Nucleic Acids and Molecular Biology, Vol. 4, ed. by Eckstein, F. and D. M. J. Lilley, Springer-Verlag, Berlin, pp. 99-109 (1990).								
					///	DA	TE CONSIDERED	(2)				
EXAMINER				1211	or not citation is in con Include copy of this form			<u> 1-3-00 </u>				

Page 23 of 62

FORM PTO-1449

EXAMINER INITIAL

> EXAMINER INITIAL

> > EXAMINER

APPLICATION NO. 09/438,358 ATTY. DOCKET NO. 0942.4640001

TORREST OF THE PARTY						Gerard et al.					
IN	ORMAT IO	N DISCL	OSURE STAT	<u>EMENT</u>		FILING DATE November 12, 1999		GROUP 1636			
						ATENT DOCUMENTS					
NER				DATE	T	AME	CLASS		SUB-CLASS	FILING DATE	
AL		DOCUME	NT NUMBER	DATE	+~						
	AA				十						
	AB			 	T						
	AC				1						
	AD				1						
E 10	3. 3.			 	\top		<u> </u>				
100	A				\top						
58° 9 1880	ARE!	 		 	\top						
&	AN	 -		 	✝⁻						
7/20	r./	 		 	十				н		
PATENT & THE	AJ			 	\top		<u> </u>				
	AK	L		FORE	TGN	PATENT DOCUMENTS					
	τ——			T	Ť		Ţ			TRANSIATION	
INER IAL		DOCUM	ENT NUMBER	DATE	9	COUNTRY	CLAS	SS	SUB-CLASS	TRANSLATION	
IAC					- [No	
	AL	 		 	+		1-			Yes No	
	AM	 			+		+-		<u> </u>	Yes No	
	AN			 	+		 		 	Yes	
	AO	<u> </u>			_		-		 	Yes	
	AP									No	
	1 87		OTHER	(Including Auth	or,	Title, Date, Pertinent Pages,	etc.)				
MAJ	AR	<u>23</u>				A novel phage λ replacement Crene 133:95-97 (1993).			that has a	utomatic	
N Ho	Hoogenboom, H.R., et al., "Multi-subunit proteins on the surface of filamentous phage: methodologies for displaying antibody (Fab) heavy and light chains," Nucl. Acids Res. 19:4133-4137 (1991).										
			Į -								

EXAMINER: Initial if reference considered, whether on not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Jaffé, A., et al., "Effects of the ccd Function of the F Plasmid on Bacterial Growth," J. Bacteriol. 163:841-849 (1985).

DATE CONSIDERED

11-3-00

									Page 24 of 62
					ATTY. DOCKET NO. 0942.4640001		APPL I C 09/438	ATION NO. ,358	
		FORM PT	0-1449		APPLICANT Gerard et al.				
<u>IN</u>	FORMATIO	ON DISC	LOSURE STATE	<u>EMENT</u>	FILING DATE November 12, 1999		GROUP 1636		
				U.S.	PATENT DOCUMENTS				
EXAMINER INITIAL		DOCUME	NT NUMBER	DATE	NAME	CLAS	s	SUB-CLASS	FILING DATE
INTTAL	AA								
	АВ								
	AC	<u> </u>							
	AD	<u> </u>							
QE JO	AE								
OE JO		<u> </u>			 				
1 m	AĞ	 							
10 8	AH 545								
1 38	AI Ž	 -		 					
	ANO.	┼							
PATENT &	≱-AK			FORE	IGN PATENT DOCUMENTS				
EMANAGE	Т			T					TDANIEL ATTON
EXAMINER INITIAL		DOCUM	ENT NUMBER	DATE	COUNTRY	CLA	ss	SUB-CLASS	TRANSLATION Yes
									No.
	AL				P				Yes No
	AM								Yes
									No
	AN	-							Yes
	AO								No
		1							Yes No
	AP			47 - Loudina Autho	or, Title, Date, Pertinent Pag	es. etc.)			
			OTHER	(Including Autho	F, Title, bate, Fertiment 129				
AAA	AR	<u>24</u>	Kanaar, R. Implicatio	, et al., "Gin-Mons for the Mecha	ediated Recombination of Cate nism of Interaction Between ${\cal C}$	nated and is-Acting	Knotte Sites	ed DNA Subst ," <i>Cell 58</i> :1	rates: 47-159 (1989).
			Killov. N.	J. et al., "Sit	e-specific recombinases: taol	s for gen	ome en	gineering,"	Irends in
	AS	24	Genetics 9	:413-421 (1993).					
H H A	AT	<u>24</u>	Kim, et all	., "Lambda Int p Science 256:198	protein between higher complex 3-263 (1992).	es at two	o dista	nt chromoso	mal loci attL
1 _						1		0000	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

EXAMINER

Page 25 of 62

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 0942.4640001	APPLICATION NO. 09/438,358	
APPLICANT Gerard et al.		
FILING DATE	GROUP	

					November 12, 1999	1636				
				U.S.	PATENT DOCUMENTS					
EXAMINER INITIAL		DOCUME	ENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE		
INITIAL	AA									
	AB									
	AC									
	AD						<u> </u>			
	AE	1								
5 C 1070	AF									
S S S S S S S S S S S S S S S S S S S	AG									
- 60 ×	AH									
& <u>*</u>	AI									
- OND	AJ									
ATENT & THE	AK							<u> </u>		
	AK			FOREI	GN PATENT DOCUMENTS					
EVANIED	Τ	T								
EXAMINER INITIAL		DOCUM	ENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION		
						ļ	ŀ	Yes No		
	AL	<u> </u>		ļ <u>-</u>			-	Yes		
	l					_		No		
	AM	 						Yes		
	AN	1						No.		
			<u> </u>			Ì		Yes No		
	AO						 	Yes		
								No		
	AP				Title Date Destinant Page	e etc)				
			OTHER	(Including Autho	r, Title, Date, Pertinent Pages	3, c.c.,				
AAJ	AR	<u>25</u>	Kozak, M., organelles	"Comparison of a Microbiol. Rev	initiation of protein synthesis	in procaryot	es, eucaryot	es, and		
DAZ	AS	<u>25</u>	Kozak, M., "An analysis of 5'-noncoding sequences from 699 vertebrate messenger RNAs," Nucl. Acids Res. 15:8125-8132 (1987).							
AAL	AT	Kozak, M., "Structural features in eukaryotic mRNAs that modulate the initiation of translation," J. Biol. Chem. 266:19867-19870 (1991).								
EXAMINER	1	<u> </u>			A.11/2	DATE CONST	DERED //	-3-00		

									Page 20 01
					ATTY. DOCKET NO. 0942.4640001		APPLIC 09/438	ATION NO. ,358	
			APPLICANT Gerard et al.						
INFORMATION DISCLOSURE STATEMENT					FILING DATE November 12, 1999		GROUP 1636		
			ι	J.S. P	PATENT DOCUMENTS				
NER		DOCUMENT NUMBER	DATE	N	AME	CLA	ss	SUB-CLASS	FILING DATE
						Į.			

L				U.S. PATENT DOCUMENTS		тТ					
EXAMINER		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE				
INITIAL	AA	DOGGERY MANAGEMENT				 					
	AB										
	AC										
	AD										
, Jo	AE										
THE STORE	AF										
10 × 10	AG										
- 3	АН										
- 19A2	AI										
INT & THE	AJ										
	AK										
				FOREIGN PATENT DOCUMENTS							
EXAMINER					CLASS	SUB-CLASS	TRANSLATION				
INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	30B CEAGE	Yes				
							No				
	AL						Yes				
	AM						No				
							Yes No				
	AN						Yes				
							No				
1	AO					7	Yes				
	AP						No				
	AP	OTUE	(Including	Author, Title, Date, Perti	nent Pages, etc.)						
		T T	(Including)	Addition y Trees y Care y							
ARJ	AR	<u>26</u> Kühn, R.,	et al., "Inc	ducible Gene Targeting in M	Mice," Science 269:142	7-1429 (1995)					
NAG					<u> </u>						
		l dantair	and To	ollervev. D. "One-step PC	R mediated strategy fo	the constru	uction of				
	Lafontaine, D. and Tollervey, D. "One-step PCR mediated strategy for the construction of conditionally expressed and epitope tagged yeast proteins," Nucl. Acids Res. 24:2469-2472 (1996).										
		+									
. 1		l akea M	et al "T	argeted oncogene activatio ad. Sci. USA 89:6232-6236 (n by site-specific red	combination i	n transgenic				
AAA	AT	26 Lakso, M	roc. Natl. Ac	ad. Sci. USA 89:6232-6236 ((1992).						

Page 27 of 62

								1030	
			A	TTY. DOCKET NO. 1942.4640001		APPLIC 09/438	ATION NO. ,358		
		PTO-1449		PPLICANT Gerard et al.					
	INFORMATION D	ISCLOSURE STATEMENT	F	ILING DATE lovember 12, 1999		GROUP 1636			_
			U.S. PAT	ENT DOCUMENTS					_
AMINER		_		-	CLA	ss	SUB-CLASS	FILING DATE	

					NOVERIDE: 127 17					
				U.:	S. PATENT DOCUMENTS					
EXAMINER INITIAL		DOCUME	NT NUMBER	DATE	NAME	CLA	SS SUB-CLA	SS FILING DATE		
	AA									
	AB									
	AC			<u> </u>						
	AD									
	AE									
EVO	AF									
6 2	AG									
Tillio .	1 H			<u> </u>						
	A.			<u> </u>						
र्खें	AJ									
PATENT & THE	AK			<u> </u>		<u></u>				
· Charles				FOR	EIGN PATENT DOCUMENTS	<u> </u>				
XAMINER				2475	COUNTRY	CL	ASS SUB-CL	ASS TRANSLATION		
NITIAL	ļ	DOCUM	ENT NUMBER	DATE	COUNTRI			Yes		
	AL							N.		
	1							Ye N		
	AM							Ye		
								N		
	AN	-						Ye		
	AO							N N		
	1,10							Ye		
	AP									
			OTHER	(Including Aut	hor, Title, Date, Per	tinent Pages, etc.	.)			
AHJ	AR	<u>27</u>	Lander, E.	S., "The New Go	enomics: Global Views	of Biology," Scie	nce 27 4:536-539	(1996).		
D# 0	As	<u>27</u>	Landy, A., "Mechanistic and structural complexity in the site-specific recombination pathways of Int and FLP," Curr. Opin. Genet. Develop. 3:699-707 (1993).							
AAI	АТ	AT 27 Landy, A., "Dynamic, Structural, and Regulatory Aspects of λ Site-Specific Recombination," Annu. Rev. Biochem. 58:913-949 (1989).								
CVAMINED					1.111	DA	TE CONSIDERED	11-3-00		

EXAMINER

1/

							•		Page 28 of 62
					ATTY. DOCKET NO. 0942.4640001		APPLIC 09/438	CATION NO. B,358	
		FORM PT	0-1449		APPLICANT				_
<u>IN</u>	FORMAT	ON DISC	LOSURE STATE	<u>EMENT</u>	Gerard et al.		GROUP 1636		
					November 12, 1999 PATENT DOCUMENTS				
				<u></u>	. PATENT DOCUMENTS				
KAMINER NITIAL		DOCUME	NT NUMBER	DATE	NAME	CLA	.ss	SUB-CLASS_	FILING DATE
	AA			 				1	
	АВ	-							
	AC	<u> </u>							
	AD			 					
E JOY	AE								
- A	AF								
8 10 10	AG AH	+							
	AI	+							
\$	AJ							 	
PAT (C)	AK								<u> </u>
				FORE	IGN PATENT DOCUMENTS	- T		T	
XAMINER			CUT NUMBER	DATE	COUNTRY	CL	ASS	SUB-CLASS	TRANSLATION
NITIAL	+	DOCUM	ENT NUMBER	DATE					Yes
	AL			 				+	Yes
	AM								No.
	AFI								Yes
	AN			 					Yes
	AO								No.
	120-								Yes No
	AP				or, Title, Date, Pertinent	Pages, etc	.)		
		_	OTHER	(Including Auth	or, litte, bate, reference	1 49407 444			
					an a	nding of Ve	aget Fil	P Recombinas	e to Its
AA	DAR	28	Lebreton,	B., et al., "Mu " Genetics 118:3	tations That Improve the Bi 393-400 (1988).	iliailig of te	,030 121		
NAM			Substrate,	407701					
		Til Vi	5						
LA	, ,	20	Lee, E. C.	., et al., "Gene	tic Analysis of Escherichia H' Recognition Site," J. B	coli Integ acteriol 1	ration 73:609-	Host Factor 617 (1991).	Interactions
MAL	AS	<u>28</u>	with Its E	Bacteriophage A	H' Recognition Site, 0. 5	ucter 1011 2	• • • • • • • • • • • • • • • • • • • •		
, -	`								
MM1			Leona J-l	M., et al., "Ger	neration of single base-pai	r deletions	, inser	tions, and s	substitutions by
NHA	AT	<u>28</u>	a site-sp	ecific recombina	ation system," Proc. Natl.	ACAO. SCI. (JSA 82:(077U-0774 (I	,,,,
EVANINED					27/1/1/	7 DA	TE CONS	SIDERED	11-3-00
EXAMINER					a La. A. A.	ı			

Page 29 of 62

					ATTY. DOCKET NO. APPLICATION NO. 09/438,358				
		FORM PTO-	1449		APPLICANT				
<u>INI</u>	FORMATIC	ON DISCLO	SURE STAT	EMENT	Gerard et al. FILING DATE November 12, 1999		GROUP 1636		
				U.S.	PATENT DOCUMENTS				
XAMINER NITIAL		DOCUMENT	NUMBER	DATE	NAME	c	LASS	SUB-CLASS	FILING DATE
NITIAL	AA								
	AB								
	AC	<u> </u>							
10	AD	ļ		 					
E 10%	AE AF	┼──							
	AF 5AG	-							
	FAH .	 						 	
-\$	AI				<u> </u>	+		 	
ATENT & TEN	AJ			<u> </u>					
	AK	<u> </u>			DOGUMENTS				
	τ			FORE	GN PATENT DOCUMENTS				
EXAMINER		DOCUMEN	IT NUMBER	DATE	COUNTRY		CLASS	SUB-CLASS	TRANSLATION Yes
INITIAL	 					İ			No
	AL	-		 					Yes No
	AM			 					Yes No
	AN								Yes
	AO								No Yes
	AP								No
	I Ar		OTHER	(Including Autho	or, Title, Date, Pertiner	nt Pages, e	tc.)		
AAG	AR	29 L	iu, Q., e recombina	et al., "The univ nt DNA without re	ector plasmid-fusion sys striction enzymes," <i>Curr</i>	stem, a meth	od for ra 300-1309	apid constru (December 19	ction o 998).
	AS	29	Lorbach, Mutants,"	E. et al., "Site J. Mol. Biol. 29	specific Recombination i 6:1175 4181 (March 2000)	in Human Ce	lls Catal	yzed by Phag	ge λ Integrase
AAZ	АТ	1 1	a	Thomanacan-Madla	fficient Generation of Intelligent Insertion of Foreign 1. 67(8):4566-4579 (1993		ecombinan a Baculo	nt Baculoviru ovirus Genom	uses by Site- e Propagated in
EXAMINER					126/11	1	DATE CONS	IDERED	11-3-00

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

APPLICATION NO. 09/438,358 ATTY. DOCKET NO. 0942.4640001 APPLICANT Gerard et al. GROUP 1636

<u>IN</u>	FORMAT I	ON DISC	LOSURE STATI	<u>EMENT</u>	FILING DATE November 12, 1999	FILING DATE GROUP 1636				
				U.	S. PATENT DOCUMENTS		———Т			
MINER		DOCUME	ENT NUMBER	DATE	NAME	CLA	ss s	UB-CLASS	FILING DATE	
TIAL	AA	DOCUME	HT HOMBER							
	AB	<u> </u>								
	AC									
	AD									
PEX	AE	<u> </u>								
										
A TOTO		<u> </u>			+					
ets ,	(B) (S)	├		 	-					
100 mark	<u> </u>	┼		 						
THE BINT	AK	+		 						
	AK			FOF	REIGN PATENT DOCUMENTS					
AMINER	T	\top) (1	ASS	SUB-CLASS	TRANSLATION	
ITIAL	L	DOCU	MENT NUMBER	DATE	COUNTRY		700		Ye	
	١,,								N	
	AL	+							Ye	
	AM								Ye	
	T								N	
	AN	+		 					Ye	
	AO								Ye	
									<u> </u>	
	AP		OTHER	(Including Aut	hor, Title, Date, Pertine	nt Pages, etc	.)			
AHJ	7 AR	30	recombinat	tion in plant p	R., "The Gin recombinase protoplasts," Mol. Gen. Gen					
FAR	AS	30	Mahillon, Genetica	Mahillon, J., et al., "IS231 and other Bacillus thuringiensis transposable elements: a review," Genetica 93:13-26 (1994).						
AHO	AT	30	Matsuzaki Specific	, H., et al., Recombination	"Chromosome Engineering in System of a Yeast Plasmid,				ng a Site- 0).	
					1/1/1	DA	TE CONSID	ERED //-	3-00	
EXAMINER										

Page 31 of 62

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

APPLICATION NO. 09/438,358 ATTY. DOCKET NO. 0942.4640001 APPLICANT

Gerard et al. **GROUP** FILING DATE 1636 November 12, 1999

				U.S	. PATENT DOCUMENTS			
(AMINER						CLASS	SUB-CLASS	FILING DATE
ITIAL		DOCUME	NT NUMBER	DATE	NAME			
	AA	\						
	AB	 						
	AC	 		ļ				
	AD				1			
SF 79	AE	 						
C	3 <u>A</u>	ļ		 				
O 18 Mills	—	-		}				
SEP ,	D	<u> </u>		 				
۵. ها	X ₁			 				
FIN & THE PARTY	AJ			 				
	AK	<u> </u>						
				FORE	IGN PATENT DOCUMENTS		T	
XAMINER					COUNTRY	CLASS	SUB-CLASS	TRANSLATION
INITIAL		DOCUM	IENT NUMBER	DATE	COONTRI			Yes
	١							No
	AL	+		 		ì		Yes No
	AM	1						Yes
	 				1		1	No
	AN			 				Yes
		l			_			No
	AO						ļ	Yes No
	AP	ì			<u> </u>			NO
	Α.		OTHER	(Including Auth	or, Title, Date, Pertinent Pa	ges, etc.)		
1 42	AR	31		LE and Brimac	ombe, R., "Prokaryotic transla 10:402-407 (1994).		eractive path	way leading to
AAd	AS	31	Medberry,	s.L., et al., " tion," Nucl. Aci	Intra-chromosomal rearrangement ds Res. 23:485-490 (1995).	nts generated b	oy Cre- <i>lox</i> si	te-specific
HAZ	AT	31	Miki, T. DNA Gyras (1992)	et al., "Control e Subunit A Supp	ofS of Chromosomal DNA by Se press letD (ccdB) Product Grow			coli. Mutants of iol. 225:39-52
					12/6/2	DATE CON	SIDERED //	- 3-00

EXAMINER

Page 32 of 62

					ATTY. DOCKET NO. 0942.4640001		APPLICATION NO. 09/438,358	
		FORM PTO	0-1449		APPL1CANT			
11	NFORMAT I	ON DISCL	OSURE STATE	MENT	Gerard et al. FILING DATE November 12, 1999		GROUP 1636	
				U	.S. PATENT DOCUMENTS			T
MINER	T	Τ			NAME	CLAS	SS SUB-CLASS	FILING DATE
TIAL	↓	DOCUME	NT NUMBER	DATE	NAME			
	AA							
	AB	 						<u> </u>
	AC	 						<u> </u>
OF VC	AD	 						
	AE							
——— Allin	AF F-1	+						
3E 18 3000	KA .	 		 				
	STANI	+						
THE THANK	AI_	+		 				
	AJ	+						
	AK			FC	REIGN PATENT DOCUMENTS			
		Т		T		\ a	ASS SUB-CLAS	STRANSLATION
MINER TIAL		DOCUM	ENT NUMBER	DATE	COUNTRY		ASS SUB-CLAS	Y
	AL							Y
		l						
	AM	+						Y
	AN							Y
						_		
	AO							Y
	AP	1						
	I AF		OTHER	(Including Au	thor, Title, Date, Pertino	ent Pages, etc.	.)	
	AR	32	Mizuuchi, the Inter	K. and Mizuu pelecular Reac	chi, k. "Integrative Reco tion," Cold Spring Harb. S	ombination of B ymp. Quant. Bio	macteriophage A: 07. 43:1114-1114 (In Vitro Study
	AS	322	Mizuuchi attachmen	M. and Mizuud t site of phas	chi K., "The extent of DN ge lambda," Nucl. Acids Res	A sequence request. 18:1193-1208	uired for a funct	ional bactèrial
			Mozo, T.	and Hooykaas,	P. J. J., "Design of a no plant transformation," MC	ovel system for ol. Gen. Genet 2	the construction 236:1-7 (1992).	of vectors for
AA	AT	<u>32</u>	Agrobacte	er rum meararea				
YAMINER			Agrobacte		or not citation is in continuous copy of this form	// DA	TE CONSIDERED	1-3-00

Page 33 of 62

									Page 33 01 02
					ATTY. DOCKET NO. 0942.4640001		APPL I 0	ATION NO. 3,358	
		FORM P	го-1449		APPLICANT Gerard et al.				
<u>IN</u>	<u>FORMAT I</u>	ON DISC	LOSURE STATE	MENT	FILING DATE November 12, 1999		GROUP 1636		
				11.6	. PATENT DOCUMENTS				
				0.3	PATENT BOOKIEM				THE DATE
EXAMINER INITIAL		DOCUM	ENT NUMBER	DATE	NAME	CL	ASS	SUB-CLASS	FILING DATE
	AA								
	AB					` _			
	AC							 	
	AD				ļ				
PEN	AE				 				
	PAF				 			 	
SEP 1 B 7000	<u> </u>			<u> </u>				 	
ets /	5 4							 	
- 63	Δ _I							 	
FAT & TRACE	AJ				 				
	AK				DOMESTIC DOMESTIC				
				FORE	IGN PATENT DOCUMENTS	T			
EXAMINER		20011	MENT NUMBER	DATE	COUNTRY	c	LASS	SUB-CLASS	TRANSLATION
INITIAL		DOCU	MENT NUMBER	DATE					Yes No
	AL								Yes
									No
	AM			 					Yes
									No
	AN	+							Yes No
	AO			<u> </u>				 	Yes
	AP								No
			OTHER	(Including Autho	or, Title, Date, Pert	inent Pages, et	c.)		
M7	J.	33	Mullins, L	.J., et al., "Ef	fficient Cre-lox linea nic animals," <i>Nucl. Ac</i>	risation of BAC cids Res. 25(12)	Cs: appl 1:2539-25	ications to 40 (June 199	physical mapping 77).
177			30						
AAA	AS	<u>33</u>	Nagaraja, Bacterioph	R. and Weisberg ages HKO22 and	, R. A., "Specificity λ," J. Bacteriol. 172:	Determinants i :6540-6550 (1990	n the At 0).	tachment Sit	es of
			1			enienhago Lambo	la DNA <i>Ir</i>	ı Vitro. " Pro	oc. Natl. Acad.
AAd	AT	<u>33</u>	Nash, H.A Sci. USA	., "Integrative 72:1072-1076 (19	Recombination of Bact 75).	eriopnage Lambo	IG DAR II		

EXAMINER: Initial if reference considered, whether or not citation is an conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

EXAMINER

DATE CONSIDERED

Page 34 of 62

	ATTY. DOCKET NO. 0942.4640001	APPLICA 09/438,	TION NO. 358	
	APPLICANT Gerard et al.			
INFORMATION DISCLOSURE STATEMENT	FILING DATE November 12, 1999	GROUP 1636		
	ATENT DOCUMENTS			
			CUR-CLASS	FILING DATE

(AMINER		T		U.S. PAT	ENT DOCUMENTS			
(AMINER		T					i i	
IITIAL	İ	DOCUMENT NUM	BER DATE_	NAM	E	CLASS	SUB-CLASS	FILING DATE
IIIIAL	AA							
-	AB						 	
	AC						 	
	AD							
SE N	AE	ļ					†	
	AF							
3 1 8 7000 ES	AG							
) <u>(s)</u>	AH	 						
A. S.	AI							
WATER BY	AJ	+	+					
	AK			FOREIGN	PATENT DOCUMENTS			
XAMINER	Τ	T			UNTRY	CLASS	SUB-CLASS	TRANSLATION
INITIAL		DOCUMENT NU	MBER DATE		ONTRI			Ye
	AL							Ye
								N
	AM							Ye N
	AN							Ye
	AO							Ye
	AP							<u> </u>
	AF		THER (Inclu	ding Author.	Title, Date, Pertine	ent Pages, etc.)		
H A	AR	34 Nash,	H.A., and or required	Robertson, CA. for lambda int	, "Purification and egra tive recombina	I properties of the E ation," <i>J. Biol. Che</i>	scherichia c m. 256: 9246 -9	oli protein 0253 (1981).
HAJ	AS	34 Nash Enzyr	, H. A., "Pl no]. 100:210	rification and -216 (1983).	d Properties of the	Bacteriophage Lambda	a Int Proteir	Meth.
	. AT	Nash	, н. А., et	al., "Role of	homology in site-s	pecific recombination , Natl. Acad. Sci. US	n of bacterio A <i>84</i> :4049-40	ophage λ: 53 (1987).

EXAMINER

11-3-00

Page 35 of 62

					ATTY. DOCKET NO. 0942.4640001		APPLICA 09/438	ATION NO. ,358	
		FORM PT	0-1449		APPLICANT Gerard et al.				
<u>I</u>	NFORMATIC	ON DISC	LOSURE STATI	<u>EMENT</u>	FILING DATE November 12, 1999		GROUP 1636		
					U.S. PATENT DOCUMENTS		T		
AMINER		DOCUME	NT NUMBER	DATE	NAME	CL	ASS	SUB-CLASS	FILING DATE
	AA								
	AB	├		<u> </u>					
	AC	 		 					
OF VO	AD								
100	7/2								
- 18.Dz	TAF B			 					
\$	AG S	 		 					
A CAR	AH							<u> </u>	
PATENT & THAT	AI								
	AK								
					FOREIGN PATENT DOCUMENTS			T	1
VANTUED	\top	1				\ c.	LASS	SUB-CLASS	TRANSLATION
KAMINER NITIAL		DOCUM	MENT NUMBER	DATE	COUNTRY		LAGO	000 0000	Ye
	0.0								N N
	AL	+		+					Ye:
	AM							 	Ye
									N
	AN			 					Ye N
	AO			0					Ye
									N N
	AP				Author, Title, Date, Pert	inent Dogge etc			
	AR	35			pertson "Hetecoduplex sub- ige and strand transfer pro		anianhan	ge lambda si 3533 (1989)	te-speci/fic
AAA	AS	<u>35</u>	Nash, H.A Trends Bio	., "Bending ochem. Sci 1	and supercoiling of DNA a 5:222-227 (1990).	it the attachment	t site of	f bacterioph	age lambda,"
JA d	AT	<u>35</u>	l +ho inter	irase arm-tV	7., "A comparison of the e pe binding sites on the si 3953-3959 (1990).	effects of singlo ite-specific rec	e-base a ombinati	nd triple-ba on of bacte	ase changes in riophage lambda
JV) * -			ı						
EXAMINER					ner or not citation is in	1	ATE CONS	//	- 3-00

					ATTY. DOCKET NO. 0942,4640001		APPL1C 09/438	ATION NO. ,358			
		FORM PTO)-1449		APPLICANT						
<u>INF</u>	ORMATIC	ON DISCL	OSURE STATE	<u>MENT</u>	Gerard et al. FILING DATE November 12, 1999		GROUP 1636				
				U.	S. PATENT DOCUMENTS						
AMINER				DATE	NAME	c	LASS	SUB-CLASS	FILING DATE		
ITIAL		DOCUME	NT NUMBER	DATE	NAUL .						
	AA	 									
	AB	 						 			
2 E VO	AD .	1									
· —	AE										
8 700 0	AF										
3	AG	 		 							
C (2)	AH	┼		 				<u> </u>			
FINT & TRAPE	AI			 				 			
	AJ AK	┼						<u> </u>			
	AK			FO	REIGN PATENT DOCUMENTS			т			
XAMINER	Γ				COUNTRY		CLASS	SUB-CLASS	TRANSLATION		
NITIAL		DOCUM	ENT NUMBER	DATE	COUNTRY				Yes No		
	AL								Yes		
	\^ <u>-</u>	1					_		No		
	AM								Yes No		
	AN								Yes No		
	AO			 					Yes No		
	AP					Deman 0	tc.)				
			OTHER	(Including Au	thor, Title, Date, Pertin	nent Pages, e	(0.)				
DAJ	AR	<u>36</u>	I the C-teri	T.E., et al., minus is requi 97-3806 (1992)	'Characterization of the red for Xis—integrase co	bacteriophage operativity b	e lambda but not fo	excisionase or DNA bindi	(Xis) protein: ng," <i>EMBO J</i> .		
HH	AS	<u>36</u>	Nunes-Düb Protein R (1989).	Nunes-Düby, S.E., $et\ al.$, "Half- att Site Substrates Reveal the Homology Independence and Minima Protein Requirements for Productive Synapsis in λ Excisive Recombination," $Cell\ 59$:197-206 (1989).							
	AT	36	Nupres-Dül specific	by, et al. "S	imilarities and difference Nucl Acids Res. 26:39	es among 105 1-406 (Januar	members y 1998).	of the Int f	ramily of site-		
EXAMINER					~///		DATE CON	,	11-3-00		
					or not citation is in a Include copy of this is	onformance wi	th MPEP	509. Draw l	ine through		
EXAMINER: I	nitial not in	if refe	rence consi ance and no	dered, whether ot considered.	or not citation is in a Include copy of this to	rm with next	communic	ation to App	CICALIC.		

FORM	PTO-	1449

INFORMATION DISCLOSURE STATEMENT

APPLICATION NO. 09/438,358 ATTY. DOCKET NO. 0942.4640001 APPLICANT Gerard et al. GROUP FILING DATE

_					November 12,	1999	1636		
				U.	S. PATENT DOCUMENT	s			
EXAMINER INITIAL		DOCUME	NT NUMBER	DATE	NAME		CLASS	SUB-CLASS	FILING DATE
	AA								
	AB						<u> </u>	 	
	AC							 	
E JC N	AD						 	 	
an el	AE						+	 	
S TON E	AF								
s š	AG							<u> </u>	
Ş <u>Ş</u>	АН						<u> </u>	T	
MITCHT & THE	AI	<u> </u>		 					
	AJ	-		 					
	AK	<u> </u>		<u> </u>	DATENT DOCUM	CNTS		a	
				FOI	REIGN PATENT DOCUM	EN13			
EXAMINER		DOCUM	IENT NUMBER	DATE	COUNTRY		CLASS	SUB-CLASS	TRANSLATION
INITIAL		DOCON	ILIVI KONDEN						Yes No
	AL								Yes
									No
	AM			 					Yes No
	AN	ļ		l					Yes
		100							No
	AO			A Co					Yes
									No
	AP		OTHER	(Including Au	thor, Title, Date,	Pertinent Pages	, etc.)		
丹丹舞人	AR	37			egment of the phases Res. 22(3):354-3	ые нкп22 chromoso		aic of other	tambdoid
AAA	AS	37	Oliner, J. (1993).	.D., et al., "	<i>In vivo</i> cloning of	PCR products in	E. coli," N	lucl. Acids Re	es. 21:5192-5197
##2	AT	37	Orban, P.	c., et al. , " d. Sci. USA 89:	Tissue- and site-s :6861-6865 (1992).				
					人 /	1.11	DATE CON	SINEKEN //	3-00

EXAMINER

Page 38 of 62

					ATTY. DOCKET NO 0942.4640001).	APPLIO 09/438	ATION NO. 3,358	
		FORM PTO	o-1449		APPLICANT Gerard et al.				
1	NFORMATI	ON DISCL	OSURE STATE	<u>MENT</u>	FILING DATE November 12, 1	999	GROUP 1636		
				U	S. PATENT DOCUMENTS			T	
AMINER ITIAL		DOCUME	NT NUMBER	DATE	NAME		CLASS	SUB-CLASS	FILING DATE
1117.2	AA								
	AB	↓							
	AC	 							
OE JOY	AD	 							
O E O O	AE	+						ļ	
· Ballin		+						 	
& .	- 12 H	1							
- 3 >	AI						 		
PATENT &	AJ							+	
	AK						1		
				FC	DREIGN PATENT DOCUMEN	115	Τ		
XAMINER		DOG! 194	ENT NUMBER	DATE	COUNTRY		CLASS	SUB-CLASS	TRANSLATION
NITIAL		DOCUM	ENT NOMBER	DATE					Yes
	AL							+	Yes
									No
	AM_						1		Yes
	AN								Yes
	40								Ye
	AO								N
	AP				uthor, Title, Date, P	Pertinent Pages.	etc.)		
ANA	AR	38		_	"A system for insert re- <i>lox</i> ," <i>Plant J. 7</i> :	ional mutagenesi		mosomal rear	rangement using
	AS	38	Padgett, PCR cloni	K. A. and Soring, Gene 168	ge, J. A., "Creating 31-35 (1996).	seamless juncti	ons indepen	ndent of res	triction sites i
分分	J AT	38	Palazzolo fusion-pi	o, M. J., et a cotein synthes	1., "Phage lambda cD is and Cre-loxP auto	NA cloning vector matic plasmid su	<u>'</u>		
EXAMINER					A.		DATE CON	_	11-3-00
EVAMINED.	Initial	if refe	rence consi	dered, whethe	r or not citation is Include copy of thi	in/comformance	with MPEP (509. Draw li ation to App	ne through icant.
citation if	f not in	conform	ance and no	t considered.	r or not citation is Include copy of thi	is total water they			

Page 39 of 62

APPLICATION NO.

					ATTY. DOCKET NO. 0942.4640001		CATION NO. 38,358	
		FORM PT			APPLICANT Gerard et al.			
<u>IN</u>	FORMATI	ON DISCL	OSURE STATI	<u>MENT</u>	FILING DATE November 12, 1999	GROU 1636		
				U.S.	PATENT DOCUMENTS			
EXAMINER		DOCUME	NT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
INITIAL	AA	DOCOME	NI NONDEK					
	AB	1						
E JCZ	AC						+	
	AD							
	E _	I						
8	F							
\$	AG	_						
PATENT & TOP	АН			 				
	AI			 				
	AJ	+		 	 			
	AK			FORE	IGN PATENT DOCUMENTS			
	т			T			SUB-CLASS	TRANSLATION
EXAMINER INITIAL		DOCUM	MENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	Yes
11111111					,			No.
	AL			+				Yes No
	I AM	-]						Yes
	 	1						No
	AN							Yes No
	AO							Yes
	 						į.	No
	. AP				Title Date Portinent	Pages etc.)		
			OTHER	(Including Auth	or, Title, Date, Pertinent	rages, etc.,		
AAA	AR	<u>39</u>	Pan, G., and Topoi	et al., "Ligation somerase I," J.	n of Synthetic Activated DN Biol. Chem. 268(5): 3683-368 9	A Substrates by 9 (1993).	Site-specific	e Recombinases
HAJ	AS	<u>39</u>	Parks, R. Define a	J., and Graham, Lower Limit for	F.L., "A Helper-Dependent S Efficient DNA Packaging," s	System for Adeno J. Virol. 71(4):3	virus Vector 3293-3298 (Api	Production Helps ril 1997).
AND	AT	39	Peakman, enzymati	T. C., et al., 'cally mediated s	'Highly efficient generatio ite-specific <i>in vitro</i> recom	n of recombinant bination," <i>Nucl</i> .	baculoviruse Acids Res. 2	es by 0:495-500 (1992).
EXAMINER					6/11	DATE CO	NSIDERED /	1-3-00
						mance with MPEP	600 Draw l	ine through
EXAMINER: I citation if	nitial not in	if refe conform	rence consi ance and no	dered, whether o t considered. I	or not citation is in confo nclude copy of this form wi	ith next communi	cation to App	licant.

										Page 40 of 62
					ATTY. DOCK! 0942.46400	ET NO.		APPLIC 09/438	ATION NO. 3,358	
		FORM P			APPLICANT Gerard et	al				
IN	<u>FORMAT I</u>	ON DISC	LOSURE STATE	<u>EMENT</u>	FILING DAT	 E		GROUP 1636		
				U.	S. PATENT DOCUM					
XAMINER		T					CLA	99	SUB-CLASS	FILING DATE
NITIAL		DOCUM	ENT NUMBER	DATE	NAME		- CLA			
	AA	├ ─-					†			
	AB	┼		 						
	AC	+								
	AD	+							 	
	AF								 	
E JC	AG	1					_ _		<u> </u>	
100	***								 	
C Alle	AE						+-		 	
~ ~~	A.¥						+			
\$										
MATERIT & T	<u>~</u>			F01	REIGN PATENT DOC	UMEN 15	\top			
EXAMINER INITIAL		DOCUI	MENT NUMBER	DATE	COUNTRY		CL	ASS	SUB-CLASS	Yes
	AL_			<u> </u>			+-	<u> </u>	-	Yes
	АМ									Yes
	AN			<u> </u>			-			Yes
	AO						-			Ye:
					·		l_			N.
	AP		071150	(Including Au	thor Title, Dat	e, Pertinent Pages	, etc	.)		
AAJ	AR	40			C.N. III	A method for const 187: 231-238 (March	ructio	on of E	. coli strai	ns with multiple
AAZ	AS	40	Pichel, J determine	. G., et al., 's subsequent to	'Timing of SV40 umor progression	oncogene activatio during murine ler	on by s	site-sp elopmer	ecific recom nt," <i>Gene 8</i> :3	abination 3333-3342 (1993).
	AT	40	Pierce, J bacteries (1992).	hage P1 system	"A positive sele : Improved clon	ection vector for o	onin C. Nat	g high 1. Acad	motecutar we I. Sci. DSA 8	eight DNA by the 9:2056-2060
					1, /	111	DA	TE CONS	SIDERED //	1-3-00

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

EXAMINER

Page 41 of 62

					ATTY. DOCKET NO.		APPLICA 09/438	ATION NO. ,358	
			0-1449		0942.4640001 APPLICANT Gerard et al.				
IN	FORMAT IO	N DISC	LOSURE STATI	<u>EMENT</u>	FILING DATE November 12, 1999		GROUP 1636		
				U.	S. PATENT DOCUMENTS				
XAMINER						CL	ASS	SUB-CLASS	FILING DATE
NITIAL		DOCUME	NT NUMBER	DATE	NAME				
	AA								
	AB								
	AC								
The last transfer of the last	AD	 							
	AFO.								
0 4	AFO AG AH							 	
10 10	AH S								
1 48	AI S							 	
SHIENT	WANT								
	AK			<u> </u>				<u> </u>	
				FOR	REIGN PATENT DOCUMENTS				
EXAMINER				DATE	COUNTRY	C	LASS	SUB-CLASS	
INITIAL	 	DOCU	MENT NUMBER	DATE					Yes No
	AL	1						 	Yes
									No
	AM	┼							Yes No
	AN								Yes
	AO							_	No Yes
	- NO	1							No.
	AP				La Title Date Pertipel	nt Pages, etc	:.)		
			OTHER	(Including Aut	hor, Title, Date, Pertine	it rageof see	<u> </u>		
DAJ	AR	41	Podhajska, construct	A. J., et al.	, "Control of cloned gene -pulse-activated att-nutl-	expression b p-att-N modu	y promot le," <i>Gene</i>	er inversio e 40:163-168	n in vivo: 3 (1985).
MAJ	AS	41	Pósfai, G genome,"	., et al., "In Nucl. Acids Res	vivo excision and amplific 22(12):2392-2398 (1994).	cation of lar	rge segme	ents of the	Escherichia coli
THO	AT	41	Prasad, P of Mutati (1986).	. V., et al., 'ons within the	Symmetry Elements of the		le Site-S trate,"		
EXAMINER					Thekels				11-3-00
EXAMINER: I	nitial i	f refe	rence consid	dered, whether	or not citation is in form	formance with with next co	MPEP 60 ommunicat	9. Draw li ion to Appl	ne through icant.
citation if	not in c	ontorm	ance and no	considered.					

Page 42 of 62

FORM	PTO-	1449

INFORMATION DISCLOSURE STATEMENT

APPLICATION NO. 09/438,358 ATTY. DOCKET NO. 0942.4640001 APPLICANT Gerard et al. GROUP 1636 FILING DATE

					November 12, 1999	1 1036			
				U.S.	PATENT DOCUMENTS		 -		
(AMINER		DOCUME	NT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE	
	AA						 		
	AB	<u> </u>							
	AC			 _					
	AD	 		 					
	AE	├		<u> </u>					
OF VO		├							
all a	49 121	┼						<u> </u>	
- 10 M	A DI A	+					<u> </u>		
		1					 		
PART 8 TOP	AK	1							
3018				FORE	IGN PATENT DOCUMENTS	 _	т		
XAMINER		DOCUM	ENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION	
INITIAL		DOCOM	ENT NOTICE					Yes No	
	AL	╅			+			Yes	
	АМ			 				Yes	
	AN							Yes	
								No.	
	AO	_						Ye:	
	AP				Title Date Pertinent	t Pages, etc.)			
			OTHER	(Including Author	or, Title, Date, Pertinen	t rageo, coas,			
AAJ	AR	<u>42</u>	Svetem for	et al., "Reaction Analyzing Early 1):7794-7805 (19	ons between Half- and Full y Steps in FLP Protein-Med 192).	-FLP Recombination Hiated Site-Specifi	Target Sites	s: A Model ion," <i>J. Biol</i> .	
AA2	AS	42	Reed, R.R 25:713-71	., "Transposon-Mo 9 (1981).	ediated Site-Specific Rec	ombination: A Defi	ned in Vitro	System," Cell	
HHI	AT	42	Reed, R.R Cleavage	Reed, R.R. and N.D. Grindley, "Transposon-Mediated Site-Specific Recombination in Vitro: DNA Cleavage and Protein-DNA Linkage at the Recombination Site," <i>Cell. 25</i> :721-728 (1981).					
EVAMINER					12/1/	DATE CONS	TOERCO /	1-3-00	

Page 43 of 62

					ATTY. DOCKET NO. 0942.4640001		APPLICAT 09/438,3		
		FORM PT			APPLICANT Gerard et al.				
<u>inf</u>	ORMATI	ON DISC	LOSURE STATI	<u>EMENT</u>	FILING DATE November 12, 1999		GROUP 1636		
				U.	S. PATENT DOCUMENTS				
(AMINER		DOCUME	ENT NUMBER	DATE	NAME	CLA	ss s	SUB-CLASS	FILING DATE
TITAL	AA								
	АВ								
	AC								
	AD	 							
PE JC.	AE	+		 					
· ·	AF								
18 Tall	24H	+							
	7"								
PATENT & THE	AJ								
A/FINI &	AK								
				FO	REIGN PATENT DOCUMENTS	T			
XAMINER				DATE	COUNTRY	CL	ASS	SUB-CLASS	TRANSLATION
NITIAL	├ ──	DOCU	MENT NUMBER	DATE	COOKINI				Yes
	AL	-]	_	1					Yes
				T-					No
	AM			 					Yes
	AN								Yes
		7							No
	AO			+					Yes
	AP	1							
	17		OTHER	(Including Aut	thor, Title, Date, Pertinen	t Pages, etc.	.)		
AAJ	AR	43	Richet, E Role of Si	., et al., "The upercoiling in	Interaction of Recombinat Lambda Integrative Recombi	ion Proteins nation," <i>Cell</i>	with Sup 1 46:1011	ercoiled D -1021 (198	NA: Defining the
PAJ	AS	43	Richet, E Involves	., et al., "Syr Capture of a N	napsis of Attachment Sites aked DNA by a Protein-DNA C	during Lambda Complex," <i>Cel</i>	a Integra 7 52: 9-1 7	tive Recom	bination
AAS	AT	43	Sadowski, 165(2):34	P., "Site-Spe 1-347 (1986).	cific Recombinases: Changin				
EXAMINER					De helika		_	DERED // J	
		: 6 - 2 - 5 -	rence consi	dered, whether	or not citation is in conf Include copy of this form	ormance with	MPEP 609	. Draw li	ne through
EXAMINER: In	nitial not in	conform	ance and no	t considered.	or not citation is in cont Include copy of this form	with next cor	municati	on to Appt	, carret

					ATTY. DOCKET NO. 0942.4640001		APPLIC 09/438	ATION NO. ,358	
		FORM PTO-	1449		APPLICANT				
<u> 1NJ</u>	ORMATIC	ON DISCLO	SURE STATI	<u>EMENT</u>	FILING DATE November 12, 1999		GROUP 1636		
				U.S.	. PATENT DOCUMENTS				
		<u> </u>					.ASS	SUB-CLASS	FILING DATE
EXAMINER INITIAL		DOCUMENT	NUMBER	DATE	NAME		.дз	000 01111	
	AA								
	AB								
	AC	<u> </u>			 				
1GZ0	AD	<u> </u>							
JC 76 30	AE								
15 B	AF	<u> </u>		ļ					
7 8	AG								
S	AH	<u> </u>		 	 				
Marie M. S.	AI	<u> </u>		ļ	 				
HATTO	AJ			 					
	AK				DATENT DOCUMENTS				
				FORE	IGN PATENT DOCUMENTS				
EXAMINER	1	DOCUMEN	T NUMBER	DATE	COUNTRY		CLASS	SUB-CLASS	
INITIAL	 	DOCOME	I NOMBER					\	Yes No
	AL			 					Yes No
	АМ							 	Yes
	AN				· · · · · · · · · · · · · · · · · · ·				Yes
					·			<u> </u>	No
	AO					}			Yes No
	AP			ar duding Auth	or, Title, Date, Pertinent	Pages, et	c.)		
AAA	AR	44	*		combinase of the 2-microns $51:53-91$ (1995).			romyces cere	evisiae," <i>Prog</i> .
AAA	AS	44	Sauer, B. Acad. Sci	, et al., "Site- . USA 84:9108-91	specific insertion of DNA 12 (1987).	into a pse	eudorabie	s virus vect	tor," Proc. Natl.
DA2	AT	44	Sauer, B Saccharon	., "Functional E nyces cerevisiae,	xpression of the cre-lox S • Mol. Cell. Biol. 7:2087-	ite-Specif 2096 (1987	ic Recomb	oination Sys	tem in the Yeast
EXAMINER					D1.11.1		DATE CONS	SIDERED //-	3-00

									Page 45 of 6
					ATTY. DOCKET NO. 0942.4640001		APPLIC 09/438	ATION NO. ,358	
		FORM PTO-1449			APPLICANT Gerard et al.				
	INFORMAT IC	ON DISCLOSURE STAT	<u>EMEN1</u>		FILING DATE November 12, 1999		GROUP 1636		
				U.S. P	ATENT DOCUMENTS				Γ
XAMINER		DOCUMENT NUMBER	DATE	N.	AME	CLA	ss	SUB-CLASS	FILING DATE
NITIAL	AA	DOCOMENT NOTICE							
	-		1						1

INITIAL	1	DOCUMENT NUMBER	DATE	NAME	CLASS	30B-CLASS	1121112
	AA					+	
	AB					 	
	AC		l			 	
	AD					1	
	AE						
3C78 30	AF						
	FAG.						
8	a			<u> </u>			
0 6	AJ AK		L				
C B	YAJ_						
DULE	AK						
			FORE	IGN PATENT DOCUMENTS			
EXAMINER			DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
INITIAL		DOCUMENT NUMBER	DATE				Yes No
	AL		<u> </u>				Yes
				l,		- [No
	AM			+			Yes
	1		l				No
	AN						Yes No
	1	i i		1			
	AO						
	AO		-				Yes No
	AO AP			or, Title, Date, Pertinent Pa	ges. etc.)		Yes

Sauer, B. and Henderson, N., "The cyclization of linear DNA in *Escherichia coli* by site-specific recombination," *Gene 70*:331-341 (1988). AAS <u>45</u> Sauer, B. and Henderson, N., "Cre-stimulated recombination at loxP-containing DNA sequences placed into the mammalian genome," Nucl. Acids Res. 17:147-161 (1989). <u>45</u> Sauer, B., "Manipulation of Transgenes by Site-Specific Recombination: Use of Cre Recombinase," Meth. Enzymol. 225:890-900 (1993). <u>45</u> ΑT

EXAMINER

DATE CONSIDERED,

Page 46 of 62

						ATTY. DOCKET NO. 0942.4640001		09/438	3,358	
		FORM PTO)-1449			APPLICANT				Ì
•••			OSURE STATE	EMENT		Gerard et al.		GROUP		
<u>1N</u>	FUKMA11	ON DISCE	000,1			FILING DATE November 12, 1999		1636		
					U.S.	PATENT DOCUMENTS			 -	
					 -				SUB-CLASS	FILING DATE
XAMINER NITIAL		DOCUMEN	NT NUMBER	DATE		NAME		CLASS	SUB-CLASS	1.2
NI TINC	AA								†	
	AB			<u> </u>						
	AC				}				1	
	AD	1							1	
3678 TO	AE			↓						
3018 30	AF			<u> </u>						
	AG		·	 						
8	АН			 						
<u> </u>	AI			 						
3	AJ			_						
4.7	AK			<u> </u>	FOREI	GN PATENT DOCUMENTS				
				Τ	FUREI	GN PATENT DOGGLERIO				TOANGLATION
EXAMINER	1	DOCUM	ENT NUMBER	DATE		COUNTRY		CLASS	SUB-CLASS	TRANSLATION
INITIAL	+	DOCOM	LITT HOUSE							No
	AL							 		Yes
				1]				No
	AM_			+						Yes No
	AN									Yes
	7	1111-		7						No
	AO									Yes
1	١.,	-		Ì						NC NC
	AP	\rightarrow	OTHER	(Including	Author	r, Title, Date, Perti	nent Pages,	etc.)		
	1/		O, III.							
		M()						onnlication	ns " Curk. Op	. Biotechnol.
	AR	46	Sauer, 8. 5:521-527	, "Site-spec	fic	recombination: develo	pilients and	арритовить		
	\n\	1	5:521-527	(1994).						
		1								/
				W 1 + 4 D l D	v Cre/	lox recombination per	mits sele	ive site-s	pecific DNA	targeting to both
	AS	46	a natural	and an eng	ineere	lox recombination per d site in the yeast o	genome Wuc	1. Acids R	es. 24(23): 46	108-4613 (1990).
	1									
										
A	- 1									14 704 702 (April
177	1		Sauer R	"Inducibl	e gene	e targeting in mice u	sing the Cr	e/lox syste	em," Methods	14:381-392 (April
1 249	AT	46	1998).	• •						
74										
	L_	1				17/1	11	DATE COM	ISIDERED	11-3-00
EXAMINER						NALAG		<u></u>		
EVANINED :	Initial	if refer	ence consi	dered, whetl	her or	not citation is its c	on ormance	with MPEP t communic	ation to App	licant.
EXAMINER:	not in	conforma	ance and no	t considere	d. In	not citation is porc clude copy of this fo	MI CII HEX			

Page 47 of 62

					ATTY. DOCKET NO. 0942.4640001		APPLICATION NO. 09/438,358		
		FORM PT	0-1449		APPLICANT				
<u>IN</u>	<u>FORMAT I</u>	ON DISCL	OSURE STATE	<u>EMENT</u>	Gerard et al. FILING DATE November 12, 1999 GROUP 1636				
				U.	S. PATENT DOCUMENTS				
XAMINER NITIAL		DOCUME	NT NUMBER	DATE	NAME	CLAS	S SUB-CLASS	FILING DATE	
	AA								
	AB	<u> </u>							
	AC	 			 				
	AD			 					
C JC78	AE	+		 					
~	.1	+							
<u> </u>	AG	+						 	
<u> </u>	AI AI	 -							
PATENTS	AJ	+						 	
PATEU	AK								
				FOR	EIGN PATENT DOCUMENTS			1	
EXAMINER		T			COUNTRY	CLA	SS SUB-CLASS	TRANSLATION	
INITIAL	 	DOCUM	ENT NUMBER	DATE	COUNTRY			Yes	
	AL	1						No V	
	+~=	 						Yes No	
	AM			 				Yes	
)				*			No.	
	AN	+		 				Yes No	
	AO							Yes	
								No.	
	AP		OTHER	(Including Aut	hor, Title, Date, Pertinent	Pages, etc.)		
	AR	47	Schindelha	auer, D., and C	ooke, H.J., "Efficient combiningssR) of PAC fragments continues. 25(11):2241-2243 (June	nation of la	na vitro	in gel site ne human HPRT	
H42	AS	47	Schlake, Expression	T., and Bode, J n Cassettes at	., "Use of Mutated FLP Recog Defined Chromosomal Loci," ${\cal B}$	nition Targ Riochemistry	et (FRT) Sites fo 33:12746-12751 (1	r the Exchange of 1994).	
AA2	AT	47	Segall, A	. M. and Nash, tion: integrase	H. A., "Synaptic intermediat e can align pairs of attachme	tes in bacte ent sites,"	eriophage lambda s EMBO J. 12:4567-4	ite-specific 576 (1993).	
EXAMINER	_1		1		A.11	/		1-3-00	
				lered whether	or not citation is in conformation with the conformation of the conformation with the conformation of the	mance with M	MPEP 609. Draw li	ine through	
EXAMINER: II	nitial not in	it reter conforma	nce and not	considered.	or not citation is 20 gonford Include copy of this form wi	th next com	munication to app	, carre-	

Page 48 of 62

INFORMATION DISCLOSURE STATEMENT

APPLICATION NO. ATTY. DOCKET NO. 0942.4640001 09/438,358 APPLICANT Gerard et al. GROUP FILING DATE November 12, 1999

1636

					NOVELLECT 127 TT			
				U.S	. PATENT DOCUMENTS		T	
XAMINER NITIAL		DOCUM	ENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA							
	AB							
	AC							
	AD							
L JC78	AE							
Q & V	ÀF							
<u>- ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~</u>								
							 	
	AI						ļ	
PATENT &	AJ						<u></u>	
FAICH	AK						<u> </u>	
	17.11			FORE	IGN PATENT DOCUMENTS			
EXAMINER		\top				DI ACC	SUB-CLASS	TRANSLATION
INITIAL	<u> </u>	DOCU	MENT NUMBER	DATE	COUNTRY	CLASS	SUB-CEASS	Yes
								No
	AL							Yes
	АМ							No.
	Ari —	+						Yes
	AN			<u> </u>				Ye
								N.
	AO	18		1				Ye
	1.5							N
	AP		OTHER	(Including Auth	or, Title, Date, Pertinen	nt Pages, etc.)		
AAJ	AR	48		M., and Nash, H.	.A., "Architectural flexi ions channel the $attL$ site	Lility in lambda eit	e-specific r t pathways,"	recombination: Genes to Cells
AAA	AS	48	Senecoff, Mutational	J.F., et al., "I Analysis of th	DNA Recognition by the FL e FLP Binding Site," $J.\ M$.P Recombinase of the Mol. Biol. 201:405-42	Yeast 2 μ F 1 (1988).	Plasmid - A
AAY	AT	48	Sheffield of "paral	, P. et al., "Ov lel" expression	vercoming expression and powertors," Protein Expr.			
EVANINED					15/1	DATE CONSI	DERED //-	3-00

Page 49 of 62

	ATTY. DOCKET NO. 0942.4640001	APPLICATION NO. 09/438,358
FORM PTO-1449	APPLICANT Gerard et al.	
INFORMATION DISCLOSURE STATEMENT	FILING DATE	GROUP 1636

				U.	S. PATENT DOCUMENTS		 	
XAMINER		DOCUMEN	T NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
INITIAL	+	DOCUMEN	I NUMBER	DATE				
	AA	 						
	AB	 		l				
	AC	 					<u> </u>	
E 30	AD AR	+						
100	SAL.						<u> </u>	
0 0	A A C							
	AU	╅──						
\ <u>\$</u> \$	A	 						
PATENT &	COMPA	-}						
- FINE	- /	┼						
	AK			FOR	EIGN PATENT DOCUMENTS			
EVANINED		T		1		2, 400	CUD CLASS	TRANSLATION
EXAMINER INITIAL		DOCUME	NT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	Yes
]	No
	AL	4						Yes
					*			No.
	AM	+						Yes
	AN							No.
		1/5						Ye:
	AO							Ye
								N
	AP				Title Date Destinant	Pages etc.)		
			OTHER	(Including Aut	hor, Title, Date, Pertinent	Pages, etc.,		
	APR	49	Shuman, S. sequence s	, "Recombination pecific," <i>Proc.</i>	on mediated by vaccinia vir . Natl. Acad. Sci. USA 88:10	us DNA topoisomera 104-10108 (1991).	se I in Esche	erichia coli is
	/	+-+	$\overline{}$					
	AS	49	Sizemore tet opera	c., et al., "Qr or mutants," N	uant tative analysis of Tn1 ucl. Acids Res. 18(10):2875-	0 Tet repressor si 2880 (1990).	nding to a co	omplete set of
	_	-		$\overline{}$	/			
PHA	- AT	49	Smith, A. cells by (J. H., et al., Cre-loxP recomb	"A site-directed chromosom sination," <i>Nat. Gen.</i> 9:376-3	nal translocation i 85 (1995).	nduced in em	bryonic stem
FXAMINER					1/1/1	DATE CONS	IDERED //	1-3-00

Page 50 of 62

									rage so or or
					ATTY. DOCKET NO. 0942.4640001		09/438	CATION NO. 8,358	
		FORM PT	0-1449		APPLICANT Gerard et al.				
<u>1N</u>	FORMATIC	ON DISCL	OSURE STAT	EMENT	FILING DATE November 12, 1999 GROUP 1636				
					PATENT DOCUMENTS				
				0.8.	PATENT DOCUMENTS				
EXAMINER INITIAL		DOCUME	NT NUMBER	DATE	NAME	CL	ASS	SUB-CLASS	FILING DATE
	AA				<u> </u>			1	
	AB							1	
	AC	<u> </u>							
And the same of the same	AD			ļ					
SE 2	AE	<u> </u>		<u> </u>	<u> </u>				
1 6	AF	<u> </u>			ļ				
	AG	Ī			ļ				
48	АН								
	ΑI								
THE STATE	AJ				ļ				
	AK								
				FORE	IGN PATENT DOCUMENTS				T
EXAMINER						l c	LASS	SUB-CLASS	TRANSLATION
INITIAL	<u> </u>	DOCUM	ENT NUMBER	DATE	COUNTRY		Littoe		Yes
									No
	AL								Yes No
	AM			<u> </u>					Yes
	7					l			No
	AN								Yes
									No
	AO	-		+					Yes
	AP								No
	17		OTHER	(Including Autho	or, Title, Date, Pertiner	nt Pages, etc	:.)		
		T							
	1				tiple cloning sites carr	10v0 am	EDT م	cognition si	ites for the Cre
	1.0	ار موا	Snaith, M.	R., et al., "Mul	tiple eloning sites carr ombinases," <i>Gene 166:</i> 173 -	174 (1995).	a rai	scognife ton 3	
	740	122/	and Flp si	te-specific reco	ombinases," denc 100:113				
		1							
	+	+							
1 _ 1								noduced by P	hage λ
1711	1.5	<u>50</u>	Spengler,	s.J., et al., "1	he Stereostructure of Kr : Implications for Mechan	nots and Cate	nanes r Structu	re," <i>Cell 42</i>	:325-334 (1985).
MNO	AS	120	Integrativ	/e Recombination:	: Impercacions for meena			-	
1 10		1							
		+							
~ ^	1	1				*** ^	مام نم ه	ha Lifa Cvcl	e of
1 MILT	AT	<u>50</u>	Sternberg	, N., et al., "S	ite-specific Recombination Poring Harbor Symp. Quant.	on and its K Biol. 45:29	7-309 (1	1981).	
1 Alyan	^'	~~	Bacteriop	nage PI," COID S	or my nurbor symp. quarte.				
l J			1		_				

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

EXAMINER

DATE CONSIDERED

					ATTY. DOCKET NO. 0942.4640001		APPLICA 09/438	TION NO. 358		
		FORM PTO	- 1449		APPLICANT Gerard et al.					
	INFORMAT	ION DISCLO	OSURE_STATE	MENT	FILING DATE November 12, 1999 GROUP 1636					
					S. PATENT DOCUMENTS					
					S. PATENT DOCUMENTO			22.40	FILING DATE	
EXAMINER		DOCUMEN	NT NUMBER	DATE	NAME	CLA	ASS	SUB-CLASS	112.00	
INITIAL		DOCOME	NT NORDER							
	AA							 		
	AB	+						<u> </u>		
	AC									
	AD							 		
PF	AE AF							ļ		
0	G AF							ļ		
SEP 7 8 2000	A A							 		
SER .	- SAH					+		 		
GOART STATE	AI							 		
78 T9 AD	AJ									
	AK			FO	REIGN PATENT DOCUMENTS	T		T		
		т		1		c	LASS	SUB-CLASS	TRANSLATION	
EXAMINER	Ì	DOCUM	MENT NUMBER	DATE	COUNTRY				Yes	
INITIAL				1					No	
	AL								Yes No	
		1		Į.					Yes	
	AM								No	
	AN								Yes	
	 '`` -								No	
	AO								Yes	
				Ì						
n ()	AP			(Including A	ithor, Title, Date, Pertin	ent Pages, et	c.)			
AU	AR	51	Sternberg		"Bacteriophage P1 <i>cre</i> Gene			Region," J .	Mol. Biol.	
从	FJ as	51	Sternber DNA frag	ternberg, N., "Bacteriophage P1 cloning system for the isolation, amplification, and recovery o NA fragments as large as 100 kilobase pairs," <i>Proc. Natl. Acad. Sci. USA 87</i> :103-107 (1990).						
AL	12 A	r <u>51</u>	Storck, manipula	τ., et al., "R ation in the mo	tapid construction in yeas ouse," <i>Nucl</i> . Acids Res. 24:	t of complex :4594-4596 (1	targeti 996).	ng vectors f	or gene	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

DATE CONSIDERED

Page 52 of 62

					ATTY. DOCKET NO. 0942.4640001		APPLIC 09/438	ATION NO. ,358	
		FORM PTO	-1449		APPLICANT				
<u> 1N</u>	FORMATI	ON DISCLO	SURE STATE	<u>MENT</u>	Gerard et al. FILING DATE November 12, 1999	FILING DATE GROUP			
					J.S. PATENT DOCUMENTS				
IINER		DOCUMEN	T NUMBER	DATE	NAME	CL	ASS	SUB-CLASS	FILING DATE
IAL	AA								
	АВ								
	AC			 					
F	AD								
- C3	AE	 						<u> </u>	ļ
18 2000 2	AF							 	
10. 8	AG	+		ļ				 	
~£.\	AH	+						 	
TO TAME	AJ	1						 	
	AK								
				_ 	OREIGN PATENT DOCUMENTS				
MINER		T		DATE	COUNTRY		CLASS	SUB-CLASS	
TIAL		DOCUME	NT NUMBER	DATE				ļ	Y
	AL	\ _							Y
	AM			+					Y
	AN								,
	AO								,
	AP								
			OTHER	(Including A	outhor, Title, Date, Pertino	ent Pages, e	tc.)		
ARA	AR	<u>52</u>	Strathman 88:1247-1	n, M., et al. 250 (1991).	, "Transposon-facilitated C	ONA sequencir	ng," <i>Proc</i>	. Natl. Acad	. Sci. USA
W S	AS	52	Thompson, Site-Spec	J.F., et of	, "Mutations in an Integra nation and Regulatory Impli	tion Host Factors," J.	ctor-Bino Bacterio	ding Site: E	Prect on Lambd -1351 (1986).
MIL	AT	52	Thompson \(\lambda: Role\)	, J.F., et al of the Pl and	., "Helical-repeat depender HI protein binding sites,"	nce of integr " <i>Proc. Nat1</i> .	rative re Acad. S	combination ci. USA 85: 6	of bacterioph 323-6327 (1988
Mu.			1						
EXAMINER			1		~/1/-	1-	DATE CON	SIDERED //	3-00

Page 53 of 62

					ATTY. DOCKET NO. 0942.4640001		PLICATION NO. /438,358	
		FORM PT			APPLICANT Gerard et al.			
<u>1</u> 1	NFORMAT I	ON DISCL	OSURE STATI	<u>EMENT</u>	FILING DATE November 12, 1999		ROUP 536	
				U.S	. PATENT DOCUMENTS			
AMINER ITIAL		DOCUME	NT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
TTIAL	AA				<u> </u>			
	АВ				<u> </u>			
	AC							
	AD	<u> </u>		 	 			
	AE	<u> </u>		 				
E JCX	AE AF AHA	_			+			
<u>,</u> %	1	-		 				
2 6.	AH.	 						
&	A S	+		 				
DATERT		 						
	AK			FORE	IGN PATENT DOCUMENTS			1
XAMINER	T^{-}	T				CLASS	SUB-CLASS	TRANSLATION
NITIAL		DOCUM	ENT NUMBER	DATE	COUNTRY	- CLAS		Yes
	١	ļ		1				No.
	AL_			 	*			Yes
	АМ							Yes
								No.
	AN			 				Ye:
	AO							Ye
				}				N N
	AP			A Total Andreas Augh	nor, Title, Date, Pertiner	nt Pages, etc.)		
			OTHER	(Including Autr	ior, Tree, bace, tor			
	AR	53	Thorpe, H catalyzed 95:5505-5	.M and Smith, by a recombinas 510 (May 1998).	M.C.M., "In vitro site-sp se of the resolvase/invert	ecific integrat ase family," Pr	ion of bacteriop oc. Natl. Asad.	ohage DNA Sci. JUSA
Ally	AS	53	Tsurushit and light	a, N., et al., 'chain genes to	Phage display vectors for make large combinatorial	r in vivo recomb libraries," <i>Ger</i>	oination of immu de 172: 59-63 (19	noglobulin heavy 96).
MHJ	AT	53	Vanin, E. Mediated	.F., et al., "De Recombination,"	velopment of High-Titer R J. Virol. 71:7820-7826 (etroviral Produc October 1997).	cer Cell Lines b	y Using Cre-
					2/11/			-3-00
FYAMINFP								
EXAMINER					or not citation is in cont Include copy of this form	formance with MP	EP 609. Draw l	ine through

FORM	PTO-	1449

INFORMATION DISCLOSURE STATEMENT

					November 12, 1999	11030		
				u.s	PATENT DOCUMENTS			
XAMINER NITIAL		DOCUME	NT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						_	
	AB							
	AC						-	
10.	AD							
16 3018	PAE						 	
S. B.	AD AE							
) & C	(AGE)							
\$	A Zi				<u> </u>			
\	₹Ži						 	
PATENT	AJ				<u> </u>			
	AK							
				FORE	IGN PATENT DOCUMENTS		T	
XAMINER					an withy	CLASS	SUB-CLASS	TRANSLATION
INITIAL		DOCUM	ENT NUMBER	DATE	COUNTRY			Yes
	1				1 g 4,			No
	AL	1						Yes
	AM						 	No Yes
							Į.	No.
	AN							Yes
		160						No.
	AO_	+						Yes
	AP							NC
			OTHER	(Including Author	or, Title, Date, Pertinen	t Pages, etc.)		
		I		- 				
	AR	54	Waterhouse large phag	, P., et al., "C e antibody reper	combinatorial infection are ctoires," <i>Nucl. Acids Res</i> .	in vivo recombina 21(9):2265-2266 (1	993).	stegy for making
HH	AS	<u>54</u>	Wang, G., deletions	et al., "pDUAL: and DNA sequenc	A transposon-based cosming templates in vivo," P	id cloning vector f roc. Natl. Acad. Sci	or generatin . USA 90: 787	g nested 4-7878 (1993).
HA	AT	<u>54</u>	Wasserman catenation	, S.A., et al., on and supercoili	"The helical repeat of do ng," <i>Nature 334</i> :448-450 (uble-stranded DNA v 1988).	aries as a f	unction of
EXAMINER			<u></u>		A. 11-		IDERED //-	
				whother or	not citation is in conf	ormance with MPEP 60	9. Draw lir	ne through
					not citation is in comp iclude copy of this form	of marioe miles		

Page 55 of 62

FORM	PTO-	1449
------	------	------

INFORMATION DISCLOSURE STATEMENT

APPLICATION NO. ATTY. DOCKET NO. 0942.4640001 09/438,358 APPL I CANT Gerard et al. GROUP 1636 FILING DATE

					November 12, 1999				
				U.S.	PATENT DOCUMENTS		 		
XAMINER NITIAL		DOCUME	ENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE	
	AA								
	AB								
	AC				ļ				
	AD				 				
OE JOY	AE	<u> </u>		<u> </u>			 		
SE SON	\$ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<u> </u>		<u> </u>					
9,0	6						<u> </u>		
R	M _			<u> </u>					
- 1	AI						 		
Variable & Co.	AJ								
	AK	<u> </u>							
				FORE	IGN PATENT DOCUMENTS				
XAMINER				DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION	
NITIAL	 	DOCUM	MENT NUMBER	DATE				Ye	
	AL							No.	
	1							Ye N	
	AM			 				Ye	
	1	ļ						N	
	AN	-			1			Ye N	
	AO							Ye	
								N	
	AP				Title Date Destinor	ot Pages etc.)			
			OTHER	(Including Autho	or, Title, Date, Pertiner	it Pages, ctc.,			
AAJ	AR	<u>55</u>	Wierzbicki Biol. 195:	, A., et al., "A 785-794 (1987).	Nutational Analysis of	the Bacteriophage P1	Recombinaso	e Cre," J. Mol.	
HAI	AS	<u>55</u>	Hendrix,	Weisberg, R. A., and Landy, A., "Site-specific Recombination in Phage Lambda," in: "Lambda II ," Hendrix, R. W. $et\ al$., eds., Cold Spring Harbor Laboratory Press, Cold Spring Harbor, N. Y., pp. 211-250 (1983).					
AMA	AT	<u>55</u>	Wild, J., large qua (1996).	et al., "A broa ntities of 50- t	d-host-range in vivo pop co 100-kb genomic fragmen				
EVANTNED					7/1	A DATE CONS	IDERED //	3-00	

Page 56 of 62

					ATTY. DOC			APPLICA 09/438	ATION NO. ,358	
	1	FORM PTC)-1449		APPLICANT Gerard et					
<u>info</u>	ORMAT I C	N DISCL	OSURE STATE	<u>MENT</u>	FILING DA	TE		GROUP 1636		
				U	.S. PATENT DOCU	MENTS				
MINER				DATE	NAME		CL	ASS	SUB-CLASS	FILING DATE
TIAL		DOCUME	NT NUMBER	DATE					 	
	AB								 	
	AC									
	AD			ļ						
	AE									
A S	AF									
- 95 ⊈	AG H	┼							<u> </u>	
	AI	 							 	
MITE IT & TO	AJ									
MITEN	AK					OCUMENTS				
					OREIGN PATENT DO	OCOMENTS				TRANSI ATTON
AMINER		DOCUM	ENT NUMBER	DATE	COUNTRY		c	LASS	SUB-CLASS	TRANSLATION
ITIAL		10000							\	
	AL									Ye
	AM			l						Y
	AN							—		Y
	AO	<u> </u>							 	Y
					j					
	AP		OTHER	(Including A	uthor, Title, D	ate, Pertinent N	Pages, et	c.)		
PIFI	AR	<u>56</u>	Wild, J.,		geting and retro ents for in-vivo	ofitting pre-exi			of transposo of any geno	n insertions mic fragment,"
AAJ	AS	<u>56</u>	Winoto, A	Winoto, A.,et al., "Directional Control of Site-specific Recombination by Bacteriophage λ ," J . Mol. Biol. 192:677-680 (1986).						
BAS	AT	<u>56</u>	Yang, W. (Novembe	, and Mizuuch r 1997).	i, K., "Site-sp	ecific recombina				
			_1		12/	111	- 1	ATE CON	SIDERED リー <i>アー</i>	00
EXAMINER										

Page 57 of 62

					ATTY. DOCKET NO. 09/438,358				
		FORM PT			APPLICANT Gerard et al.				
INF	ORMATIO	N DISCL	OSURE STATI	<u>MENT</u>	FILING DATE November 12, 1999		GROUP 1636		
				U.S.	PATENT DOCUMENTS				
XAMINER NITIAL		DOCUME	NT NUMBER	DATE	NAME	CLAS	ss s	JB-CLASS	FILING DATE
	AB						+		
E 1678	AC								
72N	AD								
	E F								
	AG	 							
- ST	AH	t							
WALE WIS	AI						+		
	AJ								
	AK								
				FORE	IGN PATENT DOCUMENTS				
EXAMINER		DOCUM	ENT NUMBER	DATE	COUNTRY	CLA	ASS :	SUB-CLASS	TRANSLATION
INITIAL		DOCOM	ENT NOMBER				ļ		Yes No
	AL_				 				Yes
									No
	AM	\dagger							Yes No
	AN	 		 					Yes
	AO								No Yes
	A0	†					Ì		No
	AP				Title Date Pertinent	Pages, etc.			
			OTHER	(Including Auth	or, Title, Date, Pertinent	1 4 9 4 4 1			
	MR	57	Yanisch-Pe sequences	of the M13mp18	., "Improved M13 phage clon and puc19 vectors," <i>Gene 33</i>	ning vectors 1:103-119 (1	and host	strains:	nucleotide
AH2	AS	<u>57</u>	Yoon, Y.G their amp	., et al., "Cre/ lification based	$\partial ox ho$ -mediated in vivo excis on the 2 μ m plasmid-derive	sion of larg ed system,"	e segment Gene 223:	s from ye 67-76 (No	ast genome and vember 1998).
HHO) AT	57	York, D., Tn5 intra	<i>et al.,</i> "Simple molecular transp	e and efficient generation position," Nucl. Acids Res.	in vitro of 26:1 927 -1 93	nested de 33 (April	eletions a 1998).	and inversions:
EXAMINER					Ah. M.	1	TE CONSID	//-	3-00
				doned whether o	r not citation is in conformation	mance with	MPEP 609.	Draw li	ne through
EXAMINER: In citation if n	ntial i not in c	τ reter onforma	ence considerate and no	t considered. I	r not citation is in conform nclude copy of this form wi	th next com	municatio	n to Appl	ICHIIC.

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

APPLICATION NO. 09/438,358 ATTY. DOCKET NO. 0942.4640001 APPLICANT

Gerard et al.

FILING DATE November 12, 1999

GROUP 1636

_					November 12, 199		1030		
				υ.	S. PATENT DOCUMENTS				
KAMINER NITIAL		DOCUM	ENT NUMBER	DATE	NAME	c	LASS	SUB-CLASS	FILING DATE
	AA								
	AB								
	AC								
	AD								
L JC>	AE								
· ~ ~	AF_	 							
	SG Š	 							
	W	——							
& 3	AI								
- ANTENDA	AJ	┼							
CF , CB-1	AK			500	EIGN PATENT DOCUMENTS				
				T	EIGN PATENT DOCUMENTS				
XAMINER		DOCUM	MENT NUMBER	DATE	COUNTRY	(CLASS	SUB-CLASS	TRANSLATION
NITIAL	+	12000							Yes
	AL							+	Ye
									N.
	AM	+							Ye
	AN							+	No.
					1				Ye N
	AO							7	Ye
	AP								N
	I AP		OTHER	(Including Aut)	hor, Title, Date, Per	tinent Pages, et	c.)		
AA) AR	<u>58</u>	Zhang, Y. 6 Genet. 20:1	et al., "A new 123-128 (Octobe	logic for DNA engineder 1998).	ering using reco	mbination	in Escheric	chia coli," Nat.
DAD	AS	<u>58</u>	Zhu, et al Biol. Chem	., "Homology re . <i>270</i> :11646-116	equirements for ligat 553 (1995).	ion and strand e	xcahnge b	y the FLP re	ecombinase," J.
	AT/	58	Bruckner, protein S3	R.C. and Cox,	M.M., "The histone-li Res. 17:3145-3161 (1	ike <u>H</u> protein of 989).	Escherig	nia coli is	ribosomal
EXAMINER						1/1/0	ATE CONSI	DERED	11-3-00

EXAMINER

Page 59 of 62

	ATTY. DOCKET NO. 0942.4640001	09/438,358
FORM PTO-1449	APPLICANT Gerard <i>et al</i> .	
INFORMATION DISCLOSURE STATEMENT	FILING DATE November 12, 1999	GROUP 1636

				11.5	. PATENT DOCUMENTS			
EVANINED				0.3	TATERY DOORIESTO			PTI THE BATE
EXAMINER INITIAL		DOCUMENT	NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA							
	AB							
	AC							
10	AD.							!
18 1	6 €							
C NO	AF							
0 1840	AG 💍			L				
े दु	ALE							
A	18							
77.71	AJ						 	<u> </u>
	AK							
				FORE	IGN PATENT DOCUMENTS		т	
EXAMINER					OCUMETRY.	CLASS	SUB-CLASS	TRANSLATION
INITIAL		DOCUMENT	NUMBER	DATE	COUNTRY	OE/NOC		Yes
	١							No
	AL							Yes
	AM							No.
								Yes
	AN							Yes
						ı		No.
C a	AO						O T	Ye
	AP							N
	[AP		OTHER	(Including Auth	or, Title, Date, Pertinent	Pages, etc.)		
J47	AR	59 Gae Shi	-		ll-Free Recombination Systopes Simplex Type 1 Genome,	om for Site-Specifi	c Integratio -5515 (1992)	n of Multigenic
	AS	59 Gö	itz, F., o	et al. , " Esherio <u>" Biochim. Blo</u> j	chia coli 30s mutant s lacki ohys Acta 1050: 93-97 (199 0	ing protein \$20 are	defective i	n translation
	AT	59 Gr	een, R.	and Noller, H.F	., "Ribosomes and Translat	tion," Ann Rev. Bio	срет. 66 :679	7-716 (July
EXAMINER	<u></u>	1			Ahl	DATE CONSI	DERED //	-3-00

Page 60 of 62

				ATTY. DOCKET NO. 0942.4640001		09/438,	358	
		FORM PTO-1449		APPLICANT Gerard et al.				
<u>INI</u>	FORMATIC	ON DISCLOSURE STA	<u>TEMENT</u>	FILING DATE November 12, 1999		GROUP 1636		
			U.S.	PATENT DOCUMENTS				
XAMINER		DOCUMENT NUMBER	DATE	NAME	CLA	ss	SUB-CLASS	FILING DATE
INITIAL	AA	Joseph Market Ma						
	AB							
	AC			ļ				
JOS	AD			 				
	A			 				
C PART								
10	AĚ			 				
· 🕸								
Arrant &	A 1			 			<u> </u>	
	AJ_							
	AK			IGN PATENT DOCUMENTS				
			TOKE	Idn PATEN				TRANSLATION
EXAMINER	1	DOCUMENT NUMBE	R DATE	COUNTRY		ASS	SUB-CLASS	Yes
INITIAL	+	DOGGNESS STATE					1	No
1	AL	<u> </u>						Yes
								No
	AM							Yes No
	AN						+	Yes
	+~~							No
	AO							Yes No
	1							NO
	AP	OTH	ER (Including Auth	or, Title, Date, Pertine	ent Pages, etc	:.)		
	AR			oning and nucleotide sequently of Escherichia coff			rplU and r and Mapping	ppA) for /4:59-67
	AS	60 Kitts, Defined	P.A. and Nash, H./ Order of Strand	A., "Bacteriephage Lambda Exchanges," J. Mol. Biol.	204:95-107 (ic Recom	bination Pr	oceeds with a
	AT	60 Lake, Cukary	J.A., "Evolving Ri otes," Ann. Rev. B	bosme Structure: Domains iochem 54:507-530 (1985)				
EVANINED				De l		ATE CONS		11-3-00
EXAMINER				or not citation is in con Include copy of this form	formance with	h MPEP 6	09. Draw l	ine through
EXAMINER: I	Initial not in	if reference con conformance and	sidered, whether on the considered.	or not citation is in cop Include copy of this form	n with next co	ommunica	tion to App	licant.

Page 61 of 62

						ATTY. DOCKET NO. APPLICATION NO. 09/438,358					
		FORM PTO-144	9		APPLICAN	IT					
	INFORMAT	ION DISCLOSUR	STAT	<u>EMENT</u>	Gerard 6 FILING D November			GROUP 1636			
					J.S. PATENT DOC						
XAMINER NITIAL		DOCUMENT NU	MBER	DATE	NAME		CLA	ss	SUB-CLASS	FILING DATE	
	AA										
	AB										
	AC			<u> </u>							
150	AD										
11500	AE_								 		
				 			+-		 		
35P 1 B 2000	_9-			 							
TA THANK	AI _	- 		 							
- 11-12	AJ_			 							
	AK				OREIGN PATENT D	OCUMENTS					
		T		T	SKEIGH TATENT S						
EXAMINER [NITIAL		DOCUMENT N	UMBER	DATE	COUNTRY		CL	ASS	SUB-CLASS	TRANSLATIO	
											Yes No
	AL			 			- 7				Yes
											No
	AM									Ì	Yes No
	AN								+		Yes
											No
	AO	-									Yes
	AP										No
			OTHER	(Including Au	ithor, Title, D	ate, Pertinent Pa	ges, etc.	.)			
	AR	61 Mack	ie , G. ons,"	A., "Nucteoti J. Biol. Chem	de Sequence of . 256:8477-8182	the Gene for Rib	osomal Pr	otein S	20 and Its P	lanking	
	AS	61 Norma	Fa, M. Bioch	, et al., "Re em. 53:75-112	gulation of th (1984).	e Synthesis of Ri	bosomes	and Ribo	osomal Compor	nents," Ann.	
	AT	61 Sega	ill, A.	.M., et al.,	Architectural fic DNA binding	elements in nucle proteins," <i>EMBO</i>	eoprotein J. 13:45	comple:	(1994)	angeability	of
EXAMINER						Allh	//-	re cons	//-	3-00	
FVANALUES		if reference	onsid	ered. whether	or not citation	on is in conformation this form with	nce with	MPEP 60	9. Draw lir	ne through	
citation if	not in	conformance a	nd not	considered.	Include copy	of this form yith	next com	municat	ion to Appli	cant.	

Pag	le	62	of	62

							Page 62 of (
		FORM PTO-1449		ATTY. DOCKET NO. APPLICATION NO. 0942.4640001 09/438,358					
	INFORMATI	ION DISCLOSURE STAT	FEMENT	APPLICANT Gerard et al.					
	THE OKING	TON DISCLOSORE STATE	<u> </u>	FILING DATE November 12, 1999		GROUP 1636			
			U.S.	PATENT DOCUMENTS					
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLAS	SS SUB-CLAS	S FILING DATE		
	AA					000 007.0	I TEING DATE		
	AB								
	AC		-						
	AD								
OF TO	AF			·		· · · · · · · · · · · · · · · · · · ·			
ann c	AF G		-						
SEP 18 ZULU	EAH				_				
	AI								
MADEUR	AJ								
· ·	AK								
			FOREIGN	PATENT DOCUMENTS			!		
EXAMINER INITIAL		DOCUMENT NUMBER	DATE (COUNTRY	CLAS	S SUB-CLAS	S TRANSLATION		
	AL						Yes No		
	АМ					,	Yes No		
	AN						Yes No		
	AO						Yes No		
	AP						Yes No		
		OTHER (I	ncluding Author,	Title, Date, Pertinent Page	es, etc.)				
	AR <u>é</u>	62 Wittman, H.G	Components of	Bacterial Ribosomes,"Ann.	Rev. Bioch	hem. 51: 155-183	(1982)		
	AS <u>6</u>	<u>2</u> Wittmann, ₩-€	- "Architecture	of Prokaryotic Ribosomes,"	Ann Rev.	Biochem. 52:35	65 (1983).		
	AT <u>6</u>	2							
XAMINER				126.11	DATE CO	NSIDERED	1.700		